
From: Moulton, Charles <MOULTON@adeq.state.ar.us>
Sent: Thursday, August 26, 2021 9:50 AM
To: Nelson, Russell <nelson.russell@epa.gov>
Cc: Richard Roper <rroper@bartonandroper.com>
Subject: Arkansas Pollution Control and Ecology Commission August 2021 Meeting

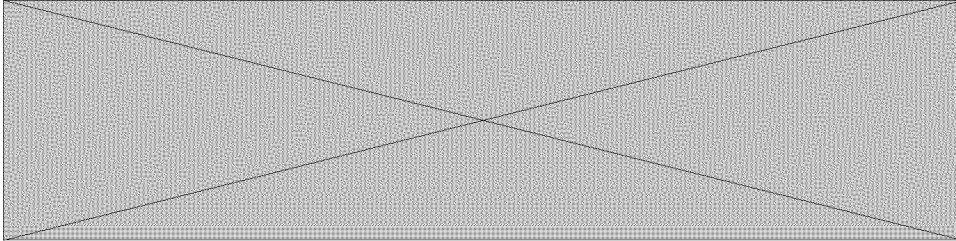
Mr. Russell –

Chairman Roper is in receipt of your August 23, 2021, letter regarding EPA Region 6's objection to the adoption of proposed amendments to Commission Rule 2.

Please be advised that the Chair has removed from the Commission's August 27, 2021, agenda consideration of the proposed amendments to Rule 2.

All best,

Charles Moulton | Administrative Law Judge
Energy & Environment | **Pollution Control & Ecology Commission**
3800 Richards Road | North Little Rock, AR 72117
t: 501.682.7890 | f: 501.682.7891 | e: moulton@adeq.state.ar.us
www.adeq.state.ar.us/commission/



To: Nelson, Russell[nelson.russell@epa.gov]; Ryland, Renea[Ryland.Renea@epa.gov]
From: Wooster, Richard[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=63ADFF6865C44B8D8BE9E40C69E929C2-WOOSTER, RICHARD]
Sent: Thur 8/12/2021 6:23:34 PM (UTC)
Subject: APCEC Roper Itr Admin determination draft 8.11.21_.docx
[APCEC Roper Itr Admin determination draft 8.11.21_.docx](#)

I like Renea's edits and additions. I've reinserted my minor edit and think once changes have all been accepted by Russell, we have a draft ready for vetting with Troy/Charles. It would be great to have that done today or tomorrow.

Thanks,

rich

To: Nelson, Russell[nelson.russell@epa.gov]
From: Moulton, Charles[MOULTON@adeq.state.ar.us]
Sent: Wed 10/6/2021 3:12:23 PM (UTC)
Subject: RE: APC&EC October hearing

Mr. Nelson –

Based on a telephone call I had with DEQ staff this morning it is my understanding DEQ does not intend to ask the Commission to adopt proposed amendments to Rule 2 at the October 22, 2021 Commission meeting.

The next scheduled Commission meeting is scheduled to be held on Friday, December 3, 2021.

Best,

Charles Moulton | Administrative Law Judge
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From: Nelson, Russell [mailto:nelson.russell@epa.gov]
Sent: Thursday, September 30, 2021 12:10 PM
To: Moulton, Charles; Goff, Patricia
Subject: RE: APC&EC October hearing

Mr. Moulton,

Thank you for your response to my request. Although not able to attend the October Commission meeting in-person, given the potential need to participate directly in the meeting depending on proposed revisions to Regulation, now Rule 2. I greatly appreciate your willingness to reach out to E&E IT regarding a Zoom link and screen in the Commission boardroom.

Depending on the Commission's hearing rules, rather than setting up equipment and a Zoom link in the Commission's chambers, it may be less difficult for you and E&E IT staff if I access the Commission's YouTube channel if E&E IT can provide a phone line/call in number that I can speak/respond from if necessary, especially if there are no other remote attendees. I have contacted EPA/R6 IT and understand that I should be able to access the Commission's YouTube channel through EPA equipment, but that is no guarantee and recommended I get a test link from E&E IT to ensure that it will work. If you think the YouTube access and a phone line is a viable option given the Commission's procedural rules, please let me know. In addition to email, if you or E&E IT need to contact me directly, my information is below. Thank you again for your efforts.

Regards,

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
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(214) 665-6646
nelson.russell@epa.gov

"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

From: Moulton, Charles <MOULTON@adeq.state.ar.us>

Sent: Monday, September 27, 2021 5:23 PM

To: Nelson, Russell <nelson.russell@epa.gov>; Goff, Patricia <GOFFPATTI@adeq.state.ar.us>

Subject: RE: APC&EC October hearing

Mr. Nelson –

We've only conducted two Commission meetings in-person since March of 2021 – all other meetings have been conducted by Zoom. If we do have a Zoom meeting I will be happy to provide you with the link. However, I anticipate that unless a dramatic increase in Covid cases occurs in Arkansas over the next couple of weeks, October's meeting will be in-person.

In-person Commission meetings are typically broadcast via the E&E YouTube channel. If all you want to do is view the meeting, rather than participate, this would be the ideal way to do so. If you want to participate in the October meeting I will reach out to E&E IT and see if we can't establish a Zoom link and screen for you in the Commission boardroom. I'm confident that other meetings held at E&E recently have been a hybrid of In-Person / Zoom so it should be a viable option.

If you have the chance give me a call tomorrow and we can discuss particulars and logistics.

Best,

Charles Moulton | Administrative Law Judge
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www.adeq.state.ar.us/commission/



ARKANSAS
ENERGY & ENVIRONMENT

From: Nelson, Russell [<mailto:nelson.russell@epa.gov>]

Sent: Monday, September 27, 2021 5:05 PM

To: Moulton, Charles; Goff, Patricia

Subject: APC&EC October hearing

Mr. Moulton, Ms. Goff;

The Environmental Protection Agency, Region 6 has been represented at previous Commission hearings in person, but given current COVID-19 risks and restrictions, I would like to know if the Commission has established remote access for its current scheduled hearings. The EPA Region 6 is particularly interested in accessing the Commission's scheduled hearing on the Arkansas Division of Environmental Quality's proposed revisions to Regulation/Rule 2 scheduled for October 22, 2021.

Thank you in advance for any information, instructions or internet links/direct phone line to access the hearing that you can provide.

Regards,

Russell

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ED_006641_00001386-00002

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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

To: Nelson, Russell[nelson.russell@epa.gov]; Wooster, Richard[Wooster.Richard@epa.gov]
From: Ryland, Renea[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=C297436CC8ED44FBAAD04CC779FED45E-RYLAND, RENEA]
Sent: Mon 8/16/2021 7:37:23 PM (UTC)
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
APCEC Roper ltr Admin determination draft 8.16.21_R6(2).docx

Hey. I made a couple of suggestions – with explanations in comments on the side. See what you think. I'm happy to discuss if you want to. Thanks. Renea

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Monday, August 16, 2021 12:12 PM
To: Wooster, Richard <Wooster.Richard@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
Importance: High

If everyone is good with this final draft letter and the enclosure (combined pdf of prior comments) I'll get it routed. I'm assuming that Renea should be in the concurrence chain.

Russell

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From: Wooster, Richard <Wooster.Richard@epa.gov>
Sent: Monday, August 16, 2021 9:27 AM
To: Nelson, Russell <nelson.russell@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
Importance: High

I need input from the two of you to create a final letter:

1. Is the single sentence referring to WOTUS okay; - Looks fine to me.
2. I need to know who's going to sign it; I suggest setting it up for Charles' signature. He'll let us know if he wants David to sign.
3. Do I leave the reference to prior comments or create an enclosure – Letter signed by Maria with comments on the 2nd draft revisions and includes my comments on the 1st draft, but more importantly an attachment with detailed comments on CC/ML. I think the letter can simply reference, without elaboration, the comments we provided. I do think it would be good to supply copies of the comments as attachments.

Richard A. Wooster
Chief
Water Quality Protection Section (WDPQ)
USEPA Region 6, Water Division
1201 Elm Street, Dallas, TX 75202

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Monday, August 16, 2021 8:26 AM
To: Ryland, Renea <Ryland.Renea@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
Importance: High

I'm in. Can't resist being the fly on the wall.

I need input from the two of you to create a final letter:

1. Is the single sentence referring to WOTUS okay;
2. I need to know who's going to sign it;
3. Do I leave the reference to prior comments or create an enclosure – Letter signed by Maria with comments on the 2nd draft revisions and includes my comments on the 1st draft, but more importantly an attachment with detailed comments on CC/ML.

The Commission's hearing on the 2nd draft (final) revisions is August 27th.

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From: Ryland, Renea <Ryland.Renea@epa.gov>
Sent: Friday, August 13, 2021 3:15 PM
To: Nelson, Russell <nelson.russell@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Hi. Just FYI. I spoke with Marcia and explained where we are on this. She agreed that a call with ECRCO would be better than putting it all in an email. She's going to send out an email requesting a call with ECRCO. I asked her to copy you guys, but it's up to you whether you want to participate on the call or not. Thanks! Renea

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Friday, August 13, 2021 1:13 PM
To: Ryland, Renea <Ryland.Renea@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Same here. I'll fiddle with the WOTUS language and run it back by y'all.
And to be clear, is everyone okay with several pages of enclosures to relay prior comments – or reference the letters to DEQ in this letter to the Commission?

Russell

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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

From: Ryland, Renea <Ryland.Renea@epa.gov>
Sent: Friday, August 13, 2021 11:02 AM
To: Wooster, Richard <Wooster.Richard@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Same here. I think her comments look good. I'm not quite sure how to word the WOTUS language though.

From: Wooster, Richard <Wooster.Richard@epa.gov>
Sent: Friday, August 13, 2021 11:00 AM
To: Nelson, Russell <nelson.russell@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
Importance: High

I'm okay with incorporating all of Jenn's suggestions.

Richard A. Wooster
Chief
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Cell: (817) 223-1924

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Friday, August 13, 2021 9:18 AM
To: Wooster, Richard <Wooster.Richard@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: Coffee Creek/Mossy Lake letter - OST response

Here's OST's edits with an exchange of comments. How much should we incorporate??

Russell

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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

To: Nelson, Russell[nelson.russell@epa.gov]
From: Brundage, Jennifer[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=A71CF92B6C90456C98335D1CC3510F67-BRUNDAGE, J]
Sent: Fri 8/13/2021 12:35:45 PM (UTC)
Subject: RE: AR WQS
APCEC Roper Itr Admin determination draft 8.12.21 .docx

Hi Russell,

Please find our suggested edits attached. Please let me know if you have any questions.

Thanks,
Jenn

From: Brundage, Jennifer
Sent: Thursday, August 12, 2021 4:23 PM
To: Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: AR WQS

Thanks Russell, I'll try and get back to you tomorrow. It doesn't sound like Regions 2 and 3 have actually drafted a letter, and they may end up having the conversation verbally. I guess what I sent you was a snippet of language they have agreed on.

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Thursday, August 12, 2021 2:44 PM
To: Brundage, Jennifer <Brundage.Jennifer@epa.gov>
Subject: FW: AR WQS
Importance: High

Slight edit....

Russell

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From: Nelson, Russell
Sent: Thursday, August 12, 2021 1:20 PM
To: Brundage, Jennifer <Brundage.Jennifer@epa.gov>
Subject: RE: AR WQS
Importance: High

Hey Jenn, I'd like to see the letter from Regions 2 & 3 if you can send it. Might change our whole approach. In the meantime, here's a draft that I wrote with a minor edit from Richard and the inclusion of language related to the Title VI complaint I wanted to leave to Renea. If OST has any suggestions or wants to draw anything in from the other letter I would need it by COB Monday/Tuesday morning if that's not too much to ask. I need to see it ASAP since this may be signed by the Acting RA and it's hard to get on his calendar for a briefing.

Russell

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From: Brundage, Jennifer <Brundage.Jennifer@epa.gov>
Sent: Thursday, August 12, 2021 11:02 AM
To: Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: AR WQS

Hi Russell,

Thanks again for taking the time to update me earlier on the region's next steps. Erica says "I just recommend making clear that regions can't make ADs, so the most a letter from a region could say is that they'd be recommending to HQ (the Administrator) that he make an AD."

She also shared this draft language that R2/R3 have developed for a letter they are planning to send in the near future on a similar issue, in case it is a helpful template for you:

If DRBC does not complete its attainability analysis by 3/2022, Regions 2 & 3 will recommend that the EPA Administrator make a CWA section 303(c)(4)(B) determination and proceed with development of federal rule to propose a revised designated use on DRBC's behalf.

Thanks,
Jenn

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Tuesday, August 10, 2021 10:43 AM
To: Brundage, Jennifer <Brundage.Jennifer@epa.gov>
Subject: RE: AR WQS

Jenn,

Since ECRCO just relayed ADEQ's response to the EPA comments on the Coffee Creek/Mossy Lake designated use issue, if that's what you want to call what they sent since they ignored our substantive comments, we are meeting at the branch level today with ORC to decide how to respond to the Region 6 representative to ECRCO who reports directly to the Acting RA on the subject. Renea and I agree that ADEQ is taking essentially taking the same position they have taken in recent years: 1) that what EPA and the public consider Coffee Creek is not really Coffee Creek, 2) Mossy Lake is not a WOTUS because it is a part of GP Crossett's waste treatment system, and 3) no changes to designated uses for Mossy Lake and most of Coffee Creek are needed. EPA has historically disagreed with ADEQ on all 3 points.

There are several ways to go here. We can relay to the acting RA and ECRCO that we don't think ADEQ adequately responded to the Informal Resolution Agreement with the expectation of getting direction from our management chain on next steps. Depending on what the process is through ECRCO, I will likely suggest that we write a letter to ADEQ or directly to the Commission outlining the possibility of granting the petition and an Administrator finding in response to the final draft, or reserve that as part of our action in response to the eventual submission of Arkansas's triennial since it will not include designated uses for WOTUS that are clearly required.

I'll keep you up on what happens.

Russell

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From: Brundage, Jennifer <Brundage.Jennifer@epa.gov>
Sent: Tuesday, August 10, 2021 8:54 AM
To: Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: AR WQS

Hi Russell,

Thanks for the update. I've updated the TR tracker to 12/31/21 as the anticipated submission date. It seems likely that Outachita Riverkeeper will turn that old draft into a real NOI before long, don't you think? Have you all had any calls with them lately?

Thanks,
Jenn

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Monday, August 9, 2021 6:28 PM
To: Brundage, Jennifer <Brundage.Jennifer@epa.gov>
Subject: FW: AR WQS

Hi Jenn,

As you can see from the email from Mary, ADEQ has filed their proposed standards with the Commission and they should be heard on August 27th.

The revised standards do not include proposals for Coffee Creek and Mossy Lake. I will be busy gathering information for our Acting RA regarding the Title VI complaint since one of ADEQ's commitments in the Resolution Agreement was to respond to EPA comments prior to filing with the Commission. Not only did ADEQ not propose any designated uses for Coffee Creek and Mossy Lake, but the responses didn't address all our comments. Just speculating, but depending on how things go with this Title VI complaint, we may be looking at asking for a Administrator's Finding on these waters if the final submission in November/December doesn't address the issue.

Russell

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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

From: Barnett, Mary <BARNETT@adeq.state.ar.us>
Sent: Monday, August 9, 2021 3:15 PM

To: Nelson, Russell <nelson.russell@epa.gov>
Cc: Martin, Joe <Joe.Martin@adeq.state.ar.us>
Subject: AR WQS

Russell,

The motion to adopt Rule 2 has been filed with the APC&E Commission.
<https://www.adeq.state.ar.us/regs/drafts/reg02/20-004-R/>

- a. APC& E Commission meeting – August 27, 2021

If adopted by APC&EC:

- b. Legislative Committees Review
 - i. Public Health, Welfare and Labor Committee – October 4, 2021
 - ii. Administrative Rules Committee - October 12, 2021

If approved by legislative committees:

- c. Final State Action – October/November 2021
- d. Submit to EPA – November/December 2021

Mary Barnett | Ecologist Coordinator
Division of Environmental Quality | Office of Water Quality
Water Quality Planning Branch
5301 Northshore Drive | North Little Rock, AR 72118
t: 501.682.0666 | e: barnett@adeq.state.ar.us



ARKANSAS
ENERGY & ENVIRONMENT

To: Ryland, Renea[Ryland.Renea@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Tue 11/30/2021 5:07:32 PM (UTC)
Subject: Draft York letter on CC/ML
York Exhibit B-1 CCML draft.docx

Tried to stick with the KISS principle....

Russell

Russell Nelson
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To: Ryland, Renea[Ryland.Renea@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Tue 11/30/2021 5:17:40 PM (UTC)
Subject: Revised Draft York letter on CC/ML
York Exhibit B-1 CCML draft2.docx

Revised it a bit already....

Russell

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From: Nelson, Russell
Sent: Tuesday, November 30, 2021 11:08 AM
To: Ryland, Renea <Ryland.Renea@epa.gov>
Subject: Draft York letter on CC/ML
Importance: High

Tried to stick with the KISS principle....

Russell

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To: Barnett, Mary[BARNETT@adeq.state.ar.us]; Martin, Joe[Joe.Martin@adeq.state.ar.us]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Tue 12/7/2021 3:29:31 PM (UTC)
Subject: RE: Rule 2 revisions

Thanks for the quick response Mary!

Russell

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From: Barnett, Mary <BARNETT@adeq.state.ar.us>
Sent: Tuesday, December 7, 2021 9:23 AM
To: Nelson, Russell <nelson.russell@epa.gov>; Martin, Joe <Joe.Martin@adeq.state.ar.us>
Subject: RE: Rule 2 revisions

Russell,

Rule 2 was postponed until the January Commission meeting.
Exhibit C-1 and C-2 dated 11/24/2021 are the version the Commission will be considering for adoption in January.

The January Commission Meeting should be Friday, January 28, 2022.
The Administrative Rules Committee meeting is Wednesday, February 16, 2022.
The Public Health ... Committee meeting is Monday, March 7, 2022.

If this schedule moves forward, submittal to EPA would be late March.

Mary Barnett | Ecologist Coordinator
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ARKANSAS
ENERGY & ENVIRONMENT

From: Nelson, Russell [<mailto:nelson.russell@epa.gov>]
Sent: Tuesday, December 7, 2021 9:04 AM
To: Martin, Joe; Barnett, Mary
Subject: Rule 2 revisions

Hi Joe and Mary,

I received an email from Charles Moulton that the APC&EC heard DEQ's proposed revisions on December 3rd. There aren't any minutes or anything like that posted on the Commission's website, so I thought I'd check with y'all to confirm that they were heard and if they were adopted. And the big question for me is if the exhibit C-1 version is what was adopted or if any alterations were made. Any guess on submission date??

The C-2 mark-up is pretty handy for me to work from as I prepare for an official submission, but I don't want to get off track and waste time if that's not representative of what's been adopted.

Thanks!

Russell

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To: Moulton, Charles[MOULTON@adeq.state.ar.us]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Tue 12/7/2021 5:01:12 PM (UTC)
Subject: RE: APC&EC December 3rd meeting

Thank you!

Russell

Russell Nelson
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From: Moulton, Charles <MOULTON@adeq.state.ar.us>
Sent: Tuesday, December 7, 2021 10:35 AM
To: Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: APC&EC December 3rd meeting

Mr. Nelson -

DEQ asked, again, for the Commission to table Rule 2 at the December Commission meeting and the Commission did so.

I do not know when, or even if, DEQ plans on asking the Commission to adopt the proposed revisions as currently drafted.

Best,

CM

----- Original Message -----
From: "Nelson, Russell" <nelson.russell@epa.gov>
Date: Tue, December 07, 2021 10:18 AM -0600
To: "Moulton, Charles" <MOULTON@adeq.state.ar.us>
CC: Richard Roper <rroper@bartonandroper.com>
Subject: RE: APC&EC December 3rd meeting

Mr. Moulton,

Thank you for your November 29th email.

I was not able to attend the Commission December 3rd meeting on ADEQ's proposed revisions to Rule 2 via their YouTube channel. I have been unable to find any minutes for the meeting on the Commission's website and contacted staff at ADEQ concerning the meeting and Commission's hearing of proposed revisions to Rule 2. I was informed that the Commission's hearing on Rule 2 was not held this past Friday, December 3rd, but has been postponed until its January 28, 2022 meeting.

Could you please confirm that this is the case?

Regards,

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
U.S. EPA, Region 6
1201 Elm St., Suite 500
Dallas, TX 75270

Cell (972) 310-1539
(214) 665-6646
nelson.russell@epa.gov

"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

From: Moulton, Charles <MOULTON@adeq.state.ar.us>
Sent: Monday, November 29, 2021 3:48 PM
To: Nelson, Russell <nelson.russell@epa.gov>
Cc: Richard Roper <rroper@bartonandroper.com>
Subject: APC&EC December 3rd meeting

Mr. Nelson –

I'm fairly confident you are already aware of this but Chairman Roper instructed me to let you know that DEQ's request for the PC&E Commission to adopt DEQ's proposed changes to Rule 2 is on the December 3, 2021, APC&EC agenda.

It's my understanding that a resolution of sorts has been reached between Region 6 and DEQ which has addressed, for now, Region 6's current concerns about Rule 2.

The December Commission meeting is in-person and it's my understanding it will be broadcast via DEQ's YouTube channel.

Best,

Charles Moulton | Administrative Law Judge
Energy & Environment | Pollution Control & Ecology Commission
3800 Richards Road | North Little Rock, AR 72117
t: 501.682.7890 | f: 501.682.7891 | e: moulton@adeq.state.ar.us
www.adeq.state.ar.us/commission/



ARKANSAS
ENERGY & ENVIRONMENT

From: Nelson, Russell [<mailto:nelson.russell@epa.gov>]
Sent: Monday, September 27, 2021 5:05 PM
To: Moulton, Charles; Goff, Patricia
Subject: APC&EC October hearing

Mr. Moulton, Ms. Goff;

The Environmental Protection Agency, Region 6 has been represented at previous Commission hearings in person, but given current COVID-19 risks and restrictions, I would like to know if the Commission has established remote access for its current scheduled hearings. The EPA Region 6 is particularly interested in accessing the Commission's scheduled hearing on the Arkansas Division of Environmental Quality's proposed revisions to Regulation/Rule 2 scheduled for October 22, 2021.

Thank you in advance for any information, instructions or internet links/direct phone line to access the hearing that you can provide.

ED_006641_00001422-00002

Regards,

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
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Cell (972) 310-1539
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To: Wooster, Richard[Wooster.Richard@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Wed 12/16/2020 4:02:08 PM (UTC)
Subject: FW: RE: EPA Complaint No. 27R-16-R6: AR DEQ's Title VI Case Update
Revised DRAFT IRA Complaint No 27R-16-R6 w EPA COMMENTS PER CALL ON 12-10-2020 jj.docx

FYI

In case you want to mention this up the COC or get a question. Getting close to wrapping this up and putting a bow on it. Renea and I made the points we needed to regarding the Coffee Creek/Mossy Lake issue. We pushed the ADEQ lawyers to say that the WQ group will respond to our comments on that issue before they submit their proposed changes to the Commission. The issue is not just the proposal of a seasonal use for these waters during flooding, but what the use will be during the dryer seasons. I think the issue is driven by what part of Coffee Creek is the natural creek, what part GP using as off-channel treatment and where their effluent comes back into the natural creek.

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
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Dallas, TX 75270

(214) 665-6646
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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

From: Moncrieffe, Marcia <Moncrieffe.Marcia@epa.gov>
Sent: Wednesday, December 16, 2020 9:53 AM
To: Gray, David <gray.david@epa.gov>
Cc: Murdock, Russell <Murdock.Russell@epa.gov>; McGuire, James <McGuire.James@epa.gov>; Smith, Suzanne <Smith.Suzanne@epa.gov>; Welton, Patricia <Welton.Patricia@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>; Hayes, Mark <hayes.mark@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>; Vaughn, Gloria <Vaughn.Gloria@epa.gov>; Burrell, Monica <Burrell.Monica@epa.gov>; Acosta, Gerardo <Acosta.Gerardo@epa.gov>; Barnett, Cheryl <Barnett.Cheryl@epa.gov>
Subject: RE: EPA Complaint No. 27R-16-R6: AR DEQ's Title VI Case Update

Good morning, David,

Hoping this email finds you doing well!

Over the last week, starting Monday the 7th and Wednesday 9th, R6 Title VI team for the referenced case had in-dept calls with ECRCO discussing and revising the draft Informal Resolution Agreement in preparation for a call we had with AR DEQ on Thursday the 10th. The calls were all productive! The aim is to close this case out before the end of this calendar year.

The EPA team (R6 and ECRCO) continued our work on the draft after the call with AR DEQ, and on Friday the 11th, we were able to turn the document around to AR DEQ. Michael McAlister, counsel for AR DEQ, has the draft, and in his latest response, he promised to consult with AR DEQ's decision-makers.

I have attached to this email the latest version of the draft Informal Resolution Agreement so that you may see the few remaining issues. Importantly, the draft allows you to see the commitments that are included; as well, if you have questions, the R6 team copied to this email will respond accordingly.

Currently, I do not have a date certain when we will hear from AR DEQ, but as soon as I have any additional movement on the case I will share.

I remain available,
Marcia

To: Brundage, Jennifer[Brundage.Jennifer@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Fri 1/29/2021 3:55:14 PM (UTC)
Subject: FW: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ
2020.12.18 Final IRA Complaint No 27R-16-R6 - W EPA Sig.pdf

Jenn,

The agreement was signed off on a day or two later by ECRCO and Becky Keogh. Here's the final document. See section **II. Background D.** and more importantly, section **III. Specific DEQ Commitments A. and B.** In the hour's long discussions, particularly on section III, I pressed DEQ lawyers, with Renea backing me up, that the WQS regulation require uses be established and reviewed. Almost a month later, when talking to Joe, the chief for ADEQ's WQ Planning branch, I asked when their response could be expected – to bring up the subject. I learned he had never heard of the Title VI complaint, much less the requirement outlined in the DEQ commitments. I don't expect this to be resolved since there is no agreement between ADEQ and EPA as to what is the natural Coffee Creek channel, what part of it GP initially discharges to, then comes back to below Mossy Lake, and it clearly being a WOTUS. Even if EPA were to relent on what is or isn't the upper and middle segments of Coffee Creek, there's just no way around the discharge from Mossy Lake (which they constructed in the 1950s) to what is clearly and by their own admission, Coffee Creek. Thus, limits should apply and that point and they should not get the dilution of the much larger Ouachita River as the permit is currently written. But until the standards are fixed, the NPDES folks keep writing it assuming that dilution.

If you look on this ADEQ page <https://www.adeq.state.ar.us/water/planning/reg2/triennial/> you can see that there are no dates associated with their current triennial. To better understand their process, look down toward the bottom at the pdf link for their rulemaking process. At one point, they were probably at step 5. When they received our and other comments (some of which reiterated ours), the whole thing went back to step 2. Joe did not know when their proposals would go back through the process and get to APC&E.

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

From: Dorka, Lilian <Dorka.Lilian@epa.gov>
Sent: Friday, December 18, 2020 9:57 AM
To: mcalister <mcalister@adeq.state.ar.us>
Cc: Hayes, Mark <hayes.mark@epa.gov>; Moncrieffe, Marcia <Moncrieffe.Marcia@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>; Covington, Jeryl <Covington.Jeryl@epa.gov>; Khan, Zahra <Khan.Zahra@epa.gov>; Johnson, Johahna <Johnson.Johahna@epa.gov>; Rhines, Dale <rhines.dale@epa.gov>; Frey, Sarah <frey.sarah@epa.gov>; Barnett, Cheryl <Barnett.Cheryl@epa.gov>; Vaughn, Gloria <Vaughn.Gloria@epa.gov>; Burrell, Monica <Burrell.Monica@epa.gov>; Brown, Jamesr <brown.jamesr@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>; Hicks, Basil <hicks@adeq.state.ar.us>; Khoury, Shane <Shane.Khoury@adeq.state.ar.us>; Randolph, Shay <shay.randolph@adeq.state.ar.us>; Temple, Kurt <Temple.Kurt@epa.gov>
Subject: RE: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ
Importance: High

Hello Michael,

Attached, please find the final clean Informal Resolution Agreement signed by me. Please let us know if you have any questions. Thanks again and we look forward to receiving the document with Secretary/Director Keogh's signature so that we can issue a Resolution Letter.

Lilian

Lilian Sotolongo Dorka, Director
External Civil Rights Compliance Office
Office of General Counsel
U.S. Environmental Protection Agency
202-564-9649 - Office
202-695-9888 - Cell

From: Dorka, Lilian

Sent: Wednesday, December 16, 2020 6:50 PM

To: McAlister, Michael <MCALISTER@adeq.state.ar.us>

Cc: Hayes, Mark <hayes.mark@epa.gov>; Moncrieffe, Marcia <Moncrieffe.Marcia@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>; Covington, Jeryl <Covington.Jeryl@epa.gov>; Khan, Zahra <Khan.Zahra@epa.gov>; Johnson, Johanna <Johnson.Johanna@epa.gov>; Rhines, Dale <rhines.dale@epa.gov>; Frey, Sarah <frey.sarah@epa.gov>; Barnett, Cheryl <Barnett.Cheryl@epa.gov>; Vaughn, Gloria <Vaughn.Gloria@epa.gov>; Burrell, Monica <Burrell.Monica@epa.gov>; Brown, Jamesr <brown.jamesr@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>; Hicks, Basil <hicks@adeq.state.ar.us>; Khoury, Shane <Shane.Khoury@adeq.state.ar.us>; Randolph, Shay <shay.randolph@adeq.state.ar.us>

Subject: RE: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ

Thanks so much Michael! I just got a nice call from Julie to let me know. * I passed along to her that you and Basil have been wonderful to work with.

We will clean up the doc and I will sign it and sent it to you as a pdf in the next day or so for Becky's signature. Once we get it back with Becky's sig., we will attach it to a "Resolution Letter" and get that out to you and the complainants.

Thanks everyone for a true team effort here! Lilian

Lilian Sotolongo Dorka, Director
External Civil Rights Compliance Office
Office of General Counsel
U.S. Environmental Protection Agency
202-564-9649 - Office
202-695-9888 - Cell

From: McAlister, Michael <MCALISTER@adeq.state.ar.us>

Sent: Wednesday, December 16, 2020 6:43 PM

To: Dorka, Lilian <Dorka.Lilian@epa.gov>

Cc: Hayes, Mark <hayes.mark@epa.gov>; Moncrieffe, Marcia <Moncrieffe.Marcia@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>; Covington, Jeryl <Covington.Jeryl@epa.gov>; Khan, Zahra <Khan.Zahra@epa.gov>; Johnson, Johanna <Johnson.Johanna@epa.gov>; Rhines, Dale <rhines.dale@epa.gov>; Frey, Sarah <frey.sarah@epa.gov>; Barnett, Cheryl <Barnett.Cheryl@epa.gov>; Vaughn, Gloria <Vaughn.Gloria@epa.gov>; Burrell, Monica <Burrell.Monica@epa.gov>; Brown, Jamesr <brown.jamesr@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>; Hicks, Basil <hicks@adeq.state.ar.us>; Khoury, Shane <Shane.Khoury@adeq.state.ar.us>; Randolph, Shay <shay.randolph@adeq.state.ar.us>

Subject: RE: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ

Importance: High

Lilian,

We have reviewed your latest edits with management. DEQ is OK with the draft. I made very minor additional edits (attached) *only* to the signature block to reflect the current name of the agency.

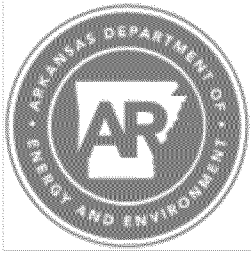
Since you all have been keeper of the document, please prepare a clean, final, signature-ready version and send it to us for final review and execution.

Thanks again for the efforts by you and your team to reach this settlement. As always, you can call me at 501 246-6141 (work cell) if we need to talk about the mechanics of wrapping this up (or anything else).

Hope you all remain safe and well, and look forward to hearing from you.

Michael McAlister | Deputy Chief Counsel

ED_006641_00001431-00002



ARKANSAS

ENERGY & ENVIRONMENT

From: Dorka, Lilian [<mailto:Dorka.Lilian@epa.gov>]
Sent: Friday, December 11, 2020 1:26 PM
To: McAlister, Michael; Hicks, Basil
Cc: Hayes, Mark; Moncrieffe, Marcia; Ryland, Renea; Covington, Jeryl; Khan, Zahra; Johnson, Johahna; Rhines, Dale; Frey, Sarah; Barnett, Cheryl; Vaughn, Gloria; Burrell, Monica; Brown, Jamesr; Nelson, Russell
Subject: RE: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ

Thanks Michael!

Lilian Sotolongo Dorka, Director
External Civil Rights Compliance Office
Office of General Counsel
U.S. Environmental Protection Agency
202-564-9649 - Office
202-695-9888 - Cell

From: McAlister, Michael <MCALISTER@adeq.state.ar.us>
Sent: Friday, December 11, 2020 2:21 PM
To: Dorka, Lilian <Dorka.Lilian@epa.gov>; Hicks, Basil <hicks@adeq.state.ar.us>
Cc: Hayes, Mark <hayes.mark@epa.gov>; Moncrieffe, Marcia <Moncrieffe.Marcia@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>; Covington, Jeryl <Covington.Jeryl@epa.gov>; Khan, Zahra <Khan.Zahra@epa.gov>; Johnson, Johahna <Johnson.Johahna@epa.gov>; Rhines, Dale <rhines.dale@epa.gov>; Frey, Sarah <frey.sarah@epa.gov>; Barnett, Cheryl <Barnett.Cheryl@epa.gov>; Vaughn, Gloria <Vaughn.Gloria@epa.gov>; Burrell, Monica <Burrell.Monica@epa.gov>; Brown, Jamesr <brown.jamesr@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ
Importance: High

Thanks, Lilian – we'll review and consult with the decision-makers.
Hope everyone on your end remains safe and well, and you have a great weekend as well!

Michael McAlister | Deputy Chief Counsel
Energy and Environment | Office of Chief Counsel
5301 Northshore Drive | North Little Rock, AR 72118
t: 501.682.0918 | e: mcalister@adeq.state.ar.us



ARKANSAS

ENERGY & ENVIRONMENT

From: Dorka, Lilian [<mailto:Dorka.Lilian@epa.gov>]

Sent: Friday, December 11, 2020 1:18 PM

To: McAlister, Michael; Hicks, Basil

Cc: Hayes, Mark; Moncrieffe, Marcia; Ryland, Renea; Covington, Jeryl; Khan, Zahra; Johnson, Johahna; Rhines, Dale; Frey, Sarah; Barnett, Cheryl; Vaughn, Gloria; Burrell, Monica; Brown, James; Nelson, Russell

Subject: RE: EPA Complaint No. 27R-16-R6: Update on Conversation with ADEQ

Hello Michael and Basil,

Thanks again for all your work on this and for the call on Thursday! As promised, attached is the draft agreement with EPA's proposed changes per our conversation.

Note that, for ease of reading, any of the comments that have been resolved per our convo on Thursday I went ahead and removed, or marked "resolved". So the only comments left "live" are those that need your attention and review, along with any of our redlined edits. Please let me know if you have any questions or concerns and we look forward to hearing back from you. Hope you have a great weekend!

Lilian

Lilian Sotolongo Dorka, Director
External Civil Rights Compliance Office
Office of General Counsel
U.S. Environmental Protection Agency
202-564-9649 - Office
202-695-9888 - Cell

To: Joe Martin (joe.martin@adeq.state.ar.us)[joe.martin@adeq.state.ar.us]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Fri 1/15/2021 9:50:28 PM (UTC)
Subject: Title VI document - ADEQ commitments
DEQ - EPA Resolution - Final 1-5-21.pdf

Joe,

Enjoyed the conversation and hope you have enough to go back to UMETCO with. I'll help however I can on that.

As discussed, I've attached the signed Title VI Resolution agreement. The sections specific to both the WQS, 305(b) and 303(d) are found in **II. Background**, which is primarily a statement of and EPA acknowledgement of historical facts. **Section D.** gets to ADEQ's responsibilities for WQS, 305(b) and 303(c) WQS and 303(d) and related activities. **Section E.** gets to the actual compliant related to the permit. One of the more difficult areas in the negotiations was on the **II. Background** and the longstanding disagreement on what and where the natural Coffee Creek is and what part of it receives GP's discharge and where it comes back into Coffee Creek just above Mossy Lake. In section **III. Specific DEQ Commitments A.**, ADEQ is committed to responding to EPA comments on the triennial proposals regarding the re-evaluation of specific to Mossy Lake and Coffee Creek prior to its final submission of its triennial revisions, addressing the reevaluation of appropriate designated uses specific to these waters.

Have a great weekend!

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
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Dallas, TX 75270

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

EXTERNAL CIVIL RIGHTS COMPLIANCE OFFICE
OFFICE OF GENERAL COUNSEL

INFORMAL RESOLUTION AGREEMENT
between the
ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT
DIVISION OF ENVIRONMENTAL QUALITY
and the
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
EPA Complaint No. 27R-16-R6

I. PURPOSE AND JURISDICTION

- A. Title VI of the Civil Rights Act of 1964, 42 U.S.C. §§ 2000d to 2000d-7 (Title VI), and other federal nondiscrimination laws, and United States Environmental Protection Agency's (EPA) implementing regulations at 40 C.F.R. Parts 5 and 7, prohibit discrimination on the basis of race, color, national origin, disability, sex and age in the programs or activities of applicants for or recipients of federal financial assistance. The Arkansas Department of Energy and Environment, Division of Environmental Quality (DEQ) receives financial assistance from EPA and, therefore, must ensure nondiscrimination in programs and activities pursuant to the provisions of Title VI, and other federal nondiscrimination laws, and EPA's implementing regulations.
- B. On June 28, 2016, EPA's External Civil Rights Compliance Office (ECRCO) accepted for investigation, EPA Complaint No. 27R-16-R6, brought under Title VI and EPA's regulation at 40 C.F.R. Part 7 that alleged discrimination based on race and color in violation of Title VI. EPA accepted for investigation the following issues:
1. Whether DEQ discriminated against the predominately African American community of West Crossett, AR, on the bases of race and/or color in violation of Title VI of the Civil Rights Act, and EPA's implementing regulation, by allowing the administrative continuance of [Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES)] Permit No. AR0001210 (issued to Georgia-Pacific Crossett LLC, Crossett Paper Operations located at 100 Mill Supply Road, Crossett, AR 71635) that allegedly does not meet the standards of the Clean Water Act; and
 2. Whether DEQ discriminated against the predominately African American community of West Crossett, AR on the bases of race and/or color in

violation of Title VI of the Civil Rights Act, and EPA's implementing regulation, by allowing the administrative continuance of NPDES Permit No. AR0001210 (issued to Georgia-Pacific Crossett LLC, Crossett Paper Operations located at 100 Mill Supply Road Crossett, AR 71635) that allegedly exposes the community to harmful emissions and that allegedly eliminates the use of Coffee Creek in violation of the Clean Water Act.

- C. During the course of ECRCO's investigation of Complaint No 27R-16-R6, DEQ agreed to enter into this Informal Resolution Agreement (Agreement). This Agreement is entered into pursuant to the authority granted EPA under the federal non-discrimination laws, including Title VI of the Civil Rights Act of 1964, and the EPA regulations found at 40 C.F.R. Parts 5 and 7, and resolves the issues accepted for investigation in EPA Complaint No. 27R-16-R6 and additional concerns identified by EPA.
- D. DEQ is committed to carrying out its responsibilities in a nondiscriminatory manner, in accordance with the requirements of Title VI, as well as the other federal non-discrimination laws enforced by EPA, and 40 C.F.R. Parts 5 and 7. The activities detailed in Sections III and IV of this Agreement which DEQ has voluntarily agreed to undertake and implement, are in furtherance of this commitment.
- E. This Agreement is entered into by DEQ and the EPA ECRCO.
- F. This Agreement does not constitute an admission by DEQ of a violation of, or a finding of compliance or noncompliance by EPA with, Title VI or 40 C.F.R. Parts 5 and 7.

II. BACKGROUND

- A. EPA acknowledges that EPA issued NPDES Permit AR0001210 to Georgia-Pacific Crossett LLC in 1974, 1986, and 1991. DEQ first issued NPDES Permit AR0001210 to Georgia-Pacific Crossett LLC in 2004. DEQ maintains that it has continued to perform its obligations to monitor Georgia-Pacific Crossett LLC's compliance with its NPDES permit through inspections and reviews of Georgia-Pacific Crossett LLC's discharge monitoring reports.
- B. EPA acknowledges that prior to the acceptance of the subject complaint, EPA initiated enforcement actions against Georgia-Pacific LLC.
 - 1. Under its authority pursuant to the Clean Water Act¹, on June 23, 2016, EPA entered into an administrative settlement with Georgia-Pacific LLC, a Delaware Company to address the facility's failing to utilize appropriate test procedures and follow Best Management Practices.²

¹ Section 309(g) of the CWA, 33 U.S.C. §1319(g).

² United States Environmental Protection Agency, Region 6, Consent Agreement and Final Order, Docket No. CWA-06-2016-1735.

2. Under its authority pursuant to the Resource Conservation and Recovery Act (RCRA),³ on August 25, 2016, EPA issued a Consent Agreement and Final Order to Georgia-Pacific LLC to address universal waste management practices, to comply with the hazardous waste manifest requirements, and to implement standard operating procedures for hazardous waste determinations.⁴
3. Under its authority pursuant to the Clean Air Act's (CAA) National Emission Standards for Hazardous Air Pollutants,⁵ on September 26, 2016, EPA issued an Administrative Compliance Order on Consent to Georgia-Pacific Chemicals LLC due to improper operational performance testing.⁶
4. Under its authority pursuant to the Clean Air Act,⁷ on January 9, 2017, EPA issued two (2) Administrative Orders on Consent to Georgia-Pacific LLC Chemicals, and Georgia-Pacific Crossett LLC to address violations of the Clean Air Act Risk Management Program regulations.⁸

C. Between 2014 and 2016, EPA, DEQ, and the Arkansas Department of Health (ADH) participated in community meetings in the City of Crossett, AR to address the following community concerns:

1. Exposure to hydrogen sulfide and overall air quality;
2. Drinking water contamination and the Georgia-Pacific wastewater treatment system;
3. Hazardous waste disposal on Georgia-Pacific property and within the community;
4. Long-term exposure to hazardous chemicals; and

³ Section 3008(a) of RCRA, 42 U.S.C. §6928 as amended by the Hazardous and Solid Waste Amendments of 1984; and 40 C.F.R. §§22.13(b) and 22.18(b)(2) and (3).

⁴ United States Environmental Protection Agency, Region 6, Consent Agreement and Final Order, USEPA Docket No. RCRA-0602016-0909 entered into by the United States Environmental Protection Agency, Region 6 and Georgia-Pacific LLC located at 100 Mill Supply Road in Crossett, AR.

⁵ 113(a)(3) of the Clean Air Act, 42 U.S.C. § 7413(a)(3).

⁶ United States Environmental Protection Agency, Region 6, Administrative Compliance Order on Consent, Docket No. CAA-06-2016-3417 issued to Georgia-Pacific LLC located in Crossett, AR.

⁷ Section 113(a)(3) of the CAA, 42 U.S.C. §7413(a)(3).

⁸ United States Environmental Protection Agency, Region 6, Administrative Compliance Order on Consent, Docket No. CAA 06-2017-3304 and No. CAA 06-2017-3305 entered into by the United States Environmental Protection Agency, Region 6 and Georgia-Pacific LLC (GP Paper and GP Chemical, respectively) located in Crossett, AR.

5. Communication at the local and state levels.⁹

Through the DEQ and ADH partnership, a community action plan was drafted which included action items specific to the City of Crossett, AR.

(https://www.epa.gov/sites/production/files/2017-03/documents/qtrly_update_ar_ej_action_plan_1-26-17.pdf).

- D. DEQ's Water Quality Planning Branch manages the State's triennial review of water quality standards, the biennial Integrated Water Quality Monitoring and Assessment Report [CWA § 305(b) Report] and the List of Impaired Waterbodies [CWA § 303(d) List], and its Water Quality Monitoring Networks for surface water and groundwater. DEQ's Water Quality Planning Branch utilizes the data collected from its Water Quality Monitoring Networks for the triennial review of water quality standards, preparation of the CWA § 305(b) Report, establishing priority ranking of total maximum daily loads for impaired waterbodies,¹⁰ developing water quality standards and criteria, evaluating the designated use attainments, and prioritizing restoration and remediation activities.¹¹
- E. EPA Complaint No. 27R-16-R6 alleges that NPDES Permit No. AR0001210, issued to Georgia-Pacific Crossett LLC, is not a legal permit because it allows Georgia-Pacific Crossett LLC "to use the upper part of Coffee Creek as an extension of its facility and without meeting Clean Water Act requirements." The complaint states that "[t]he entire length of Coffee Creek from its headwaters to the Ouachita River is a navigable water as defined in the Clean Water Act at 33 U.S.C. § 1362(7) and is a water of the United States as defined in 40 C.F.R. § 122.2." The complaint describes "Coffee Creek" as follows:

[Coffee Creek] flows south from the Georgia Pacific facility approximately three miles to a dammed portion of the creek called Mill Pond. Coffee Creek then flows from the pond approximately another five miles to Mossy Lake. From Mossy Lake, Coffee Creek flows about a half of a mile to the Ouachita River at a point approximately two miles upstream from the Louisiana border.

Since 1973, the state of Arkansas's Water Quality Standards, as approved by EPA beginning in 1980,¹² identify Coffee Creek as a water of the state that does not have primary contact recreation and fishery uses.¹³ DEQ acknowledges that there is existing

⁹ Action Plan and Chronology of Activities for the Community of Crossett; Ashley County, Arkansas; October 22, 2014; p. 1

¹⁰ 40 C.F.R. § 130.8

¹¹ 40 C.F.R. § 130.7

¹² See Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas, dated March 27, 2020, <https://www.epa.gov/wqs-tech/water-quality-standards-regulations-arkansas#state>

¹³ Arkansas Pollution Control and Ecology Commission, Regulation 2, Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas.

disagreement over whether the water of the state identified as “Coffee Creek” is clearly defined.

- F. On December 14, 2018, contemporaneously with the lodging of a Consent Decree, the United States, on behalf of EPA, and DEQ filed a Complaint in an action against Georgia Pacific Chemicals, and Georgia-Pacific Consumer Operations LLC (Settling Defendants) alleging that they violated Sections 113(b) and 112(r)(1) of the CAA, 42 U.S.C. §§ 7413(b) and 7412(r)(1) as well as Arkansas Code. Annotated §§ 8-4-103 et seq.¹⁴
- G. On February 7, 2019, EPA, DEQ, and Georgia-Pacific officials met with residents of Crossett, Arkansas for a public meeting to discuss the proposed Consent Decree. About three dozen Crossett residents and other concerned individuals attended.
- H. On June 4, 2019, Georgia-Pacific publicly announced the planned closure of the pulp manufacturing component (“Pulp Mill”), a significant part of the paper manufacturing facility in Crossett and a significant source of pollutant emissions. Because this planned closure would affect Georgia-Pacific’s ability to perform certain obligations under the original Consent Decree, the Parties negotiated the Amended Consent Decree and lodged it with the Court earlier this year. On February 7, 2020, the United States published notice of the Amended Consent Decree (ACD) in the Federal Register, 85 Fed. Reg. 7331 (Feb. 7, 2020).
- I. On May 18, 2020, the ACD was entered into by and between the United States of America, on behalf of the Environmental Protection Agency, DEQ, and the Settling Defendants. The ACD assessed a civil penalty in the sum of \$600,000, requires the facilities to comply with regulations, and implement supplemental environmental projects (SEPs) as outlined in the ACD. “Specifically, under the Amended Consent Decree, with the Permanent Shutdown of the Pulp Mill, Settling Defendants are required to pay civil penalties and perform certain supplemental environmental projects (“SEP”s) to reduce pollutant emissions.”^{15, 16}
- J. As is ECRCO’s practice, during the course of this investigation, ECRCO reviewed DEQ’s policies and procedures regarding its foundational nondiscrimination program, including the procedural safeguards required by EPA’s non-discrimination regulation, public participation policies and procedures, as well as required policies and

¹⁴ *United States, et al. v. Georgia Pac. Chem., et al.*, Case No. 1:18-cv-01076-SOH (W.D. Ark. Dec. 14, 2018); Section I; p. 1.

¹⁵ *United States, et al. v. Georgia Pac. Chem., et al.*, Case 1:18-cv-01076-SOH (W.D. Ark. May 18, 2020); Document 17-2, Page 9 of 24 Page ID #: 258; Section II; p. 5.

¹⁶ A SEP is an environmentally beneficial project that a defendant agrees to undertake in settlement of an enforcement action, but that the defendant is not otherwise legally required to perform. See EPA, Supplemental Environmental Projects Policy (May 5, 1998) (“SEP Policy”), 63 Fed. Reg. 24796, 24797-98 (May 5, 1998). In the ACD, the Settling Defendants agree to provide a long-ladder fire truck to the City of Crossett Fire Department, implement a “Vacuum Pump SEP” to achieve pollution prevention or pollution reduction, and implement an Epichlorohydrin Storage SEP to reduce the potential for pollution and off-site consequences in the event of a spill of Epichlorohydrin from the GP Chemical Facility’s trailer-based storage system.

procedures to ensure continued and meaningful access to DEQ programs and activities for persons with disabilities and limited-English proficiency. During this review, DEQ has, with ECRCO's assistance, continued to enhance its existing policies and procedures. The details of this work will be addressed under a separate process, whereby EPA will provide continued technical assistance to DEQ on its ongoing improvement to its nondiscrimination program.

III. SPECIFIC DEQ COMMITMENTS

- A. DEQ will respond to EPA's comments on Mossy Lake and Coffee Creek prior to its final submission of Rule 2 to the Arkansas Pollution Control and Ecology Commission for the current water quality standards triennial revisions. DEQ's response will address the reevaluation of appropriate designated uses specific to Coffee Creek and Mossy Lake consistent with the CWA and federal regulations and in compliance with Arkansas law.
- B. As part of DEQ's public participation process for the next interim or triennial review of water quality standards,¹⁷ DEQ will include EPA and a participant to represent the West Crossett community as a member of the triennial review stakeholder work group.¹⁸ DEQ's triennial review stakeholder work group provides a forum for public input on the development of revised water quality standards.
- C. To review Georgia-Pacific Crossett LLC's NPDES compliance status, DEQ will designate a specific task force to review Georgia Pacific's sampling and analysis including a review of the supporting lab results. As is DEQ's current process, DEQ will for two (2) years continue to review all wastewater sampling and analysis performed by Georgia-Pacific Crossett under the requirements of its NPDES permit. During the next twenty-four months, DEQ will request four (4) split samples from Georgia Pacific Crossett LLC to be sent to an accredited lab selected by DEQ and DEQ will witness the sampling event. DEQ will request that two of the four split samples include samples taken from the discharge from Mossy Lake in addition to the discharge from the Aeration Basin. DEQ will post the wastewater sampling analytical results on its website within 60 days of receipt of the analytics.
- D. DEQ will continue to work with ADH's Engineering Division that prepares and submits to EPA an annual report concerning the numbers and types of violations of the Safe Drinking Water Act regulations. ADH makes this report available to the Public through its website. ADH also makes available on its website the annual drinking water quality reports for all public water systems. These reports include

¹⁷ DEQ's next triennial review is anticipated to begin in or before 2024.

¹⁸ The water quality workgroup is appointed by the Governor of Arkansas. Per the WQ Assessments (<https://www.adeg.state.ar.us/water/planning/integrated/assessment/pdfs/20161011-listening-session-presentation.pdf>), "Stakeholder Members include: Local, State, and Federal Government entities; Industrial, Municipal, and Utility entities; Conservation and Environmental entities, and 30 members invited by the Director." The stakeholder work group meetings are public meetings. Stakeholders are the point of contact. A listserv is used to inform the public/interested parties.

public water systems' reported monitoring data and explanation of contaminants of concerns in accordance with state and federal laws. The water quality data from all five (5) public water systems in the Crossett area can be found on ADH's website. ADH also provides drinking water information for each community public water system in Arkansas. DEQ will assist ADH, as appropriate, and provide a link on DEQ's website to these ADH resources within 60 days of the signing of this Agreement.

- E. DEQ will continue to work to finalize reissuance of the Georgia Pacific Crossett LLC NPDES permit to conform with the requirements of the CWA and federal regulations in concert with EPA (Region 6). If Georgia-Pacific Chemicals LLC and Georgia-Pacific Consumer Operations LLC must obtain federal or state permits for any compliance obligations under the Amended Consent Decree, DEQ will continue to work to finalize the issuance of those permits, as appropriate. DEQ will post the Georgia Pacific Crossett LLC NPDES permit application, and final permit on its website within 60 days of approving the NPDES permit.
- F. It is DEQ's and EPA's understanding that odor reductions, particularly those related to hydrogen sulfide and other sulfur compounds, will continue due to changes to and elimination of certain processes at the facility. DEQ will continue to encourage Georgia-Pacific Crossett LLC to institute BMPs and work with Georgia-Pacific Crossett LLC to authorize changes at the facility that reduce odor. As part of any proposed maintenance or changes at the facility's wastewater treatment system, DEQ will require the Georgia-Pacific Crossett LLC to submit an Odor Management Plan to address odor that could result from that work. DEQ will make that plan available to the public through DEQ's website and provide an opportunity for the community to participate in an informational meeting about the plan.
- G. DEQ will work with the Settling Defendants to implement the May 18, 2020 Amended Consent Decree's injunctive relief and SEPs. DEQ will post the semi-annual progress report on its website within 30 days of receipt.
- H. DEQ will provide periodic updates to the public about (1) the SEPs described in the May 18, 2020 ACD that was entered into by the United States of America, DEQ, and Settling Defendants; (2) the Settling Defendants' compliance status, and (3) any information provided to DEQ by ADH that identifies health concerns for Crossett citizens. DEQ will continue to evaluate, according to their EPA-approved Compliance Monitoring Strategy, the Georgia-Pacific, LLC Crossett, AR facility's industrial processes, management of waste streams, and compliance of permitted operations, conduct appropriate multi-media inspections, and provide updates to the community regarding the facility's environmental performance. DEQ's first update will include information about how the changes at the facility have eliminated many of the sources that could contribute to the odor and air quality concerns expressed by the residents of Crossett. DEQ will submit this first update within 180 days of the signing of this Agreement, and DEQ will present this first update to the community at

the next meeting of the Arkansas Pollution Control and Ecology Commission that occurs after the update has been submitted.

- I. To further promote public engagement during permitting processes, within 180 days of the signing of this Agreement, DEQ will develop an Email List Subscription (hyperlink sign-up function or radio button) for notices related to Georgia-Pacific Crossett LLC to ensure the interested party receives notification in advance of public meetings, and the interested party receives same day notice of the opening of a public comment period and a minimum of 30-days advance notice of any public hearing on any proposed permitting action.
- J. Within 180 days of the signing of this Agreement, DEQ will develop online tutorials on how to access permitting information and monitoring data through its website and on the utilization of the DEQ reporting application for mobile devices.
- K. Within 180 days of signing the Agreement, DEQ will request that the Arkansas Department of Emergency Management (ADEM) facilitate community training and public safety awareness for the City of Crossett, AR. DEQ will request ADEM to coordinate with the City of Crossett to promote the utilization of the Integrated Public Alert & Warning System (IPAWS) [components of IPAWS: Emergency Alert System (EAS), Wireless Emergency Alerts (WEA), and National Oceanic and Atmospheric Administration (NOAA)]. DEQ will provide periodic updates on its activities related to its communication with ADEM.
- L. Within 180 days of the signing of this Agreement, DEQ will request that ADEM help Ashley County to bolster its local emergency planning committee (LEPC). DEQ will provide technical assistance and guidance to Ashley County, as appropriate. DEQ will provide periodic updates on its activities related to its communication with ADEM.
- M. To enhance protections in the community, within 180 days of the signing of this Agreement, DEQ will encourage Georgia-Pacific to work with ADEM and Ashley County through its public/private partnership program to assist with the planning and preparedness for, or mitigate damages resulting from man-made or natural disasters.

IV. GENERAL

- A. In consideration of DEQ's implementation of commitments and actions described in Section III of this Agreement, EPA will end its investigation of the complaint in EPA Complaint No. 27R-16-R6 and not issue a decision containing findings on the merits of this complaint.
- B. EPA will, upon request, provide technical assistance to DEQ regarding any of the civil rights obligations previously referenced.

- C. Within 60 days of completion, DEQ will document to EPA the completion status of each commitment identified under Section III A-L consistent with the timeframes in Section III A-L by certified mail to the Director, EPA External Civil Rights Compliance Office (Mail Code 2310A), 1200 Pennsylvania Avenue N.W., Washington D.C. 20460.
- D. Within 60 days of receipt, ECRCO will review and provide feedback about any documentation submitted by DEQ demonstrating completion of each commitment (e.g., evidence of the development of a notice of non-discrimination designation of the non-discrimination coordinator, development of grievance procedures and LEP plan, etc.) and will provide an assessment as to whether the documentation satisfies the commitment.

V. COMPUTATION OF TIME AND NOTICE

- A. As used in this Agreement, "day" shall mean a calendar day. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.
- B. Service of any documents required by this Agreement will be made personally, by certified mail with return receipt requested, or by any reliable commercial delivery service that provides written verification of delivery.
- C. Electronic documents submitted by DEQ to EPA via email will be sent to the following email address: Dorka.Lilian@epa.gov. Documents submitted by DEQ to EPA shall be sent to the Director, U.S. EPA External Civil Rights Compliance Office, Office of General Counsel (Mail Code 2310A), 1200 Pennsylvania Avenue N.W., Washington D.C. 20460.
- D. Documents submitted by EPA to DEQ will be sent to the Director of the Arkansas Department of Environmental Quality at 5301 Northshore Drive; North Little Rock, AR 72118-5317.


VI. EFFECT OF THE AGREEMENT

- A. DEQ understands that by signing this Agreement, it agrees to provide data and other information in a timely manner in accordance with the reporting requirements of this Agreement. Further, DEQ understands that during the monitoring of this Agreement, if necessary, EPA may visit DEQ, interview staff, and request such additional reports or data as are necessary for EPA to determine whether DEQ is fulfilling the terms of this Agreement.
- B. DEQ understands that EPA will continue to monitor this Agreement until EPA determines that DEQ has fully implemented this Agreement, and that a failure to

satisfy any term in this Agreement may result in the EPA re-opening the investigation.


- C. If either Party desires to modify any portion of this Agreement because of changed conditions making performance impractical or impossible, or due to material change to DEQ's program or authorities, or for other good cause, the Party seeking a modification shall promptly notify the other in writing, setting forth the facts and circumstance justifying the proposed modification. Any modification(s) to this Agreement shall take effect only upon written agreement by the Director of DEQ and the EPA's Director of ECRCO.
- D. This Agreement constitutes the entire Agreement between DEQ and EPA's ECRCO regarding the matters addressed herein, and no other statement, promise, or agreement, made by any other person shall be construed to change any commitment or term of this Agreement, except as specifically agreed to by DEQ and EPA's ECRCO in accordance with the provisions of Section VI. Paragraph C above.
- E. This Agreement does not affect DEQ's continuing responsibility to comply with Title VI or other federal non-discrimination laws and EPA's nondiscrimination regulation at 40 C.F.R. Parts 5 and 7, including § 7.85, nor does it affect EPA's investigation of any Title VI or other federal civil rights complaints or address any other matter not covered by this Agreement.
- F. The effective date of this Agreement is the date by which both Parties have signed the Agreement. This Agreement may be signed in counterparts. The Director, in her capacity as an official of DEQ, has the authority to enter into this Agreement for purposes of carrying out the activities listed in these paragraphs. The EPA's Director of ECRCO has the authority to enter into this Agreement.

On behalf of the Division of Environmental Quality:


Becky W. Keogh, Director
Division of Environmental Quality

1/05/2021
(Date)

On behalf of the External Civil Rights Compliance Office, Office of General Counsel, U.S. Environmental Protection Agency:


Lilian S. Dorka, Director
External Civil Rights Compliance Office
Office of General Counsel

12/18/2020
(Date)

To: Wooster, Richard[Wooster.Richard@epa.gov]; Ryland, Renea[Ryland.Renea@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Fri 8/13/2021 2:17:44 PM (UTC)
Subject: Coffee Creek/Mossy Lake letter - OST response
APCEC Roper Itr Admin determination draft 8.12.21_OST(2).docx

Here's OST's edits with an exchange of comments. How much should we incorporate??

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
U.S. EPA, Region 6
1201 Elm St., Suite 500
Dallas, TX 75270

(214) 665-6646
nelson.russell@epa.gov

"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

To: Ryland, Renea[Ryland.Renea@epa.gov]; Wooster, Richard[Wooster.Richard@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Mon 8/16/2021 1:25:48 PM (UTC)
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
APCEC Roper Itr Admin determination draft 8.12.21_R6(2).docx

I'm in. Can't resist being the fly on the wall.

I need input from the two of you to create a final letter:

1. Is the single sentence referring to WOTUS okay;
2. I need to know who's going to sign it;
3. Do I leave the reference to prior comments or create an enclosure – Letter signed by Maria with comments on the 2nd draft revisions and includes my comments on the 1st draft, but more importantly an attachment with detailed comments on CC/ML.

The Commission's hearing on the 2nd draft (final) revisions is August 27th.

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
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Dallas, TX 75270

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nelson.russell@epa.gov

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From: Ryland, Renea <Ryland.Renea@epa.gov>
Sent: Friday, August 13, 2021 3:15 PM
To: Nelson, Russell <nelson.russell@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Hi. Just FYI. I spoke with Marcia and explained where we are on this. She agreed that a call with ECRCO would be better than putting it all in an email. She's going to send out an email requesting a call with ECRCO. I asked her to copy you guys, but it's up to you whether you want to participate on the call or not. Thanks! Renea

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Friday, August 13, 2021 1:13 PM
To: Ryland, Renea <Ryland.Renea@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Same here. I'll fiddle with the WOTUS language and run it back by y'all.
And to be clear, is everyone okay with several pages of enclosures to relay prior comments – or reference the letters to DEQ in this letter to the Commission?

Russell

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From: Ryland, Renea <Ryland.Renea@epa.gov>

Sent: Friday, August 13, 2021 11:02 AM

To: Wooster, Richard <Wooster.Richard@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Same here. I think her comments look good. I'm not quite sure how to word the WOTUS language though.

From: Wooster, Richard <Wooster.Richard@epa.gov>

Sent: Friday, August 13, 2021 11:00 AM

To: Nelson, Russell <nelson.russell@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Importance: High

I'm okay with incorporating all of Jenn's suggestions.

Richard A. Wooster

Chief

Water Quality Protection Section (WDPQ)

USEPA Region 6, Water Division

1201 Elm Street, Dallas, TX 75202

Cell: (817) 223-1924

From: Nelson, Russell <nelson.russell@epa.gov>

Sent: Friday, August 13, 2021 9:18 AM

To: Wooster, Richard <Wooster.Richard@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>

Subject: Coffee Creek/Mossy Lake letter - OST response

Here's OST's edits with an exchange of comments. How much should we incorporate??

Russell

Russell Nelson

Regional Water Quality Standards Coordinator

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From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Mon 8/16/2021 10:54:07 PM (UTC)
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
APCEC Roper ltr Admin determination draft 8.16.21 ORC.docx

I made a few very minor changes before what you have here – my responses to your questions are included here. I'll combine them what you provided and let you and Rich take one final look before finalizing a draft and routing. Renea, do you want to be in the concurrence list??

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
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1201 Elm St., Suite 500
Dallas, TX 75270

(214) 665-6646
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From: Ryland, Renea <Ryland.Renea@epa.gov>
Sent: Monday, August 16, 2021 2:37 PM
To: Nelson, Russell <nelson.russell@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Hey. I made a couple of suggestions – with explanations in comments on the side. See what you think. I'm happy to discuss if you want to. Thanks. Renea

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Monday, August 16, 2021 12:12 PM
To: Wooster, Richard <Wooster.Richard@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
Importance: High

If everyone is good with this final draft letter and the enclosure (combined pdf of prior comments) I'll get it routed. I'm assuming that Renea should be in the concurrence chain.

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
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1201 Elm St., Suite 500
Dallas, TX 75270

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From: Wooster, Richard <Wooster.Richard@epa.gov>
Sent: Monday, August 16, 2021 9:27 AM

To: Nelson, Russell <nelson.russell@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Importance: High

I need input from the two of you to create a final letter:

1. Is the single sentence referring to WOTUS okay; - Looks fine to me.
2. I need to know who's going to sign it; I suggest setting it up for Charles' signature. He'll let us know if he wants David to sign.
3. Do I leave the reference to prior comments or create an enclosure – Letter signed by Maria with comments on the 2nd draft revisions and includes my comments on the 1st draft, but more importantly an attachment with detailed comments on CC/ML. I think the letter can simply reference, without elaboration, the comments we provided. I do think it would be good to supply copies of the comments as attachments.

Richard A. Wooster

Chief

Water Quality Protection Section (WDPQ)

USEPA Region 6, Water Division

1201 Elm Street, Dallas, TX 75202

Cell: (817) 223-1924

From: Nelson, Russell <nelson.russell@epa.gov>

Sent: Monday, August 16, 2021 8:26 AM

To: Ryland, Renea <Ryland.Renea@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Importance: High

I'm in. Can't resist being the fly on the wall.

I need input from the two of you to create a final letter:

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Sent: Friday, August 13, 2021 3:15 PM

To: Nelson, Russell <nelson.russell@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

ED_006641_00001446-00002

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From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Friday, August 13, 2021 1:13 PM
To: Ryland, Renea <Ryland.Renea@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

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And to be clear, is everyone okay with several pages of enclosures to relay prior comments – or reference the letters to DEQ in this letter to the Commission?

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From: Ryland, Renea <Ryland.Renea@epa.gov>
Sent: Friday, August 13, 2021 11:02 AM
To: Wooster, Richard <Wooster.Richard@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

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From: Wooster, Richard <Wooster.Richard@epa.gov>
Sent: Friday, August 13, 2021 11:00 AM
To: Nelson, Russell <nelson.russell@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
Importance: High

I'm okay with incorporating all of Jenn's suggestions.

Richard A. Wooster
Chief
Water Quality Protection Section (WDPQ)
USEPA Region 6, Water Division
1201 Elm Street, Dallas, TX 75202
Cell: (817) 223-1924

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Friday, August 13, 2021 9:18 AM
To: Wooster, Richard <Wooster.Richard@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>
Subject: Coffee Creek/Mossy Lake letter - OST response

Here's OST's edits with an exchange of comments. How much should we incorporate??

Russell

Russell Nelson
Regional Water Quality Standards Coordinator
Water Quality Protection (WDPQ)
U.S. EPA, Region 6
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"Follow the law. Follow the science. And be transparent." B. Ruckelshaus

To: Ryland, Renea[Ryland.Renea@epa.gov]; Wooster, Richard[Wooster.Richard@epa.gov]
From: Nelson, Russell[/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=E27FA59F166C40DEAAB3D866285A30BB-NELSON, RUSSELL]
Sent: Fri 8/13/2021 8:55:37 PM (UTC)
Subject: RE: Coffee Creek/Mossy Lake letter - OST response
[APCEC Roper ltr Admin determination draft 8.12.21_R6\(2\).docx](#)
[Final EPA public cmnt ltr MLM 9.3.2020 \(1\).pdf](#)
[EPA cmnts on Exh A Draft Markup Rule 2 attachmts Sept2020.pdf](#)

Let me know what y'all think. I need to know who's going to sign it as well, Charles or David and if additional cc's are desired. I've also attached the last comments which consist of a letter Maria signed, the provision comments which refer to an attachment that includes my initial comments and those that you reviewed Renea. The signed letter as a pdf can be merged the prior comments into a single document if need be.

Russell

Russell Nelson
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From: Ryland, Renea <Ryland.Renea@epa.gov>
Sent: Friday, August 13, 2021 1:47 PM
To: Nelson, Russell <nelson.russell@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Good with me.

From: Nelson, Russell <nelson.russell@epa.gov>
Sent: Friday, August 13, 2021 1:13 PM
To: Ryland, Renea <Ryland.Renea@epa.gov>; Wooster, Richard <Wooster.Richard@epa.gov>
Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Same here. I'll fiddle with the WOTUS language and run it back by y'all.
And to be clear, is everyone okay with several pages of enclosures to relay prior comments – or reference the letters to DEQ in this letter to the Commission?

Russell

Russell Nelson
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From: Ryland, Renea <Ryland.Renea@epa.gov>

Sent: Friday, August 13, 2021 11:02 AM

To: Wooster, Richard <Wooster.Richard@epa.gov>; Nelson, Russell <nelson.russell@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Same here. I think her comments look good. I'm not quite sure how to word the WOTUS language though.

From: Wooster, Richard <Wooster.Richard@epa.gov>

Sent: Friday, August 13, 2021 11:00 AM

To: Nelson, Russell <nelson.russell@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>

Subject: RE: Coffee Creek/Mossy Lake letter - OST response

Importance: High

I'm okay with incorporating all of Jenn's suggestions.

Richard A. Wooster

Chief

Water Quality Protection Section (WDPQ)

USEPA Region 6, Water Division

1201 Elm Street, Dallas, TX 75202

Cell: (817) 223-1924

From: Nelson, Russell <nelson.russell@epa.gov>

Sent: Friday, August 13, 2021 9:18 AM

To: Wooster, Richard <Wooster.Richard@epa.gov>; Ryland, Renea <Ryland.Renea@epa.gov>

Subject: Coffee Creek/Mossy Lake letter - OST response

Here's OST's edits with an exchange of comments. How much should we incorporate??

Russell

Russell Nelson

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1201 ELM STREET, SUITE 500
DALLAS, TEXAS 75270

September 3, 2020

Jacob Harper
Arkansas Department of Energy and Environment
5301 Northshore Drive
Little Rock, AR 72118-5317

Re: EPA comments on proposed 2019 triennial revisions to Arkansas's Regulation No. 2

Dear Mr. Harper:

The U.S. Environmental Protection Agency (EPA) would like to provide the enclosed comments on the Arkansas Department of Energy and Environment, Division of Environmental Quality's (ADEQ) proposed amendments to *Regulation No. 2: Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas*. These revisions were considered by the Arkansas Pollution Control and Ecology Commission (Commission) in its June 26, 2020 meeting to consider the ADEQ's petition to initiate rulemaking. These amendments were subsequently presented at the Commissions public hearing on July 29, 2020.

In its review, the EPA noted that Regulation 2 includes some significant proposed revisions, many addressing issues from prior EPA actions. In the enclosed document, we have included comments and recommendations that should be addressed prior to submission to the EPA for action. We also noted a number of revisions made in response to changes in State law. The majority of these are considered nonsubstantive with regard to the Clean Water Act (CWA) and its implementing regulation and do not require direct comment. Our enclosed comments follow the ADEQ's original "Master List" format for consistency with our prior comments, excluding nonsubstantive revisions. Please note that the enclosed questions, comments and recommendations do not constitute a determination by the EPA under CWA §303(c). Approval/disapproval decisions will be made by the Region following the adoption of new/revised standards by the Commission and their formal submission to the EPA.

Thank you for the opportunity to provide these comments on the proposed 2019 triennial revisions to Regulation 2. If you have any questions or concerns, please contact me at (214) 665- 8138, or have your staff contact Russell Nelson at (214) 665-6646 or nelson.russell@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Maria L. Martinez".

Maria L. Martinez
Chief
Permitting & Water Quality Branch

Enclosure

cc: Becky Keogh, Secretary, Arkansas Department of Energy and Environment
Robert Blanz, Ph.D., Associate Director, Office of Water Quality
Joe Martin, Branch Manager, Water Quality Planning, ADEQ

EPA COMMENTS AND RECOMMENDATIONS ON PROPOSED REVISIONS TO ADEQ'S RULE NO. 2

EPA Comments/Recommendations: The following detail the EPA's comments and recommendations on the proposed revisions and other provisions found in ADEQ's Exhibit A: Rule 2 Markup Draft. The EPA's comments and recommendations follow the ADEQ's original "Master List of Revisions" format to simplify both the ADEQ and the public's understanding of comments on a particular provision. Many of these comments were provided to ADEQ by the EPA previously, but have been provided again here alongside new comments on more recent changes to Rule 2 as reflected in the Exhibit A markup draft. ADEQ's revisions considered by the EPA to be non-substantive, or on which the EPA has no comments to provide, have been removed from this list of comments. In addition, the EPA refers to Clean Water Act (CWA) and federal regulation requirements specific to designated uses for Coffee Creek and Mossy Lake and has provided attachments related to comments on other provisions.

Categories of revisions:

Revisions reflecting previous EPA disapproval actions and/or no action taken

Revisions reflecting previous EPA approval actions

Provisions not revised with EPA comments/recommendation

CHAPTER 1: AUTHORITY, GENERAL PRINCIPLES, AND COVERAGE

Regs. 2.102 – 2.106

- Revision:** Reg. 2.104: Strike “, unless the permittee is completing site-specific criteria development or is under a plan approved by the Department, in accordance with Regs. 2.306, 2.308, and the State of Arkansas Continuing Planning Process.”

Justification: In an October 31, 2016 Technical Support Document (TSD), EPA took no action on the inclusion of this phrase; however, they noted that “EPA could not determine how this exception would be implemented consistent with CWA [sections] 303 and 502 and their implementing regulations.” Because of this, the Department elects to remove the phrase that was inserted during the 2013 triennial review.

EPA Comment/Recommendation: As described in the EPA's October 31, 2016 action, we did not act on this phrase for the reason described in our TSD and here in ADEQ's justification. The EPA supports ADEQ's proposal to strike this phrase.
- Revision:** Reg. 2.105: Insert “temporary” before “modification.”

Justification: Water quality standards modifications are temporary under an EIP. This language clarifies that.
- EPA Comment/Recommendation:** The insertion of “temporary” provides clarity for this authorizing provision. The EPA recognizes that the statutory language for Environmental Improvement Projects (EIP) held in Appendix B cannot be modified by the Arkansas Pollution Control & Ecology Commission (Commission) but recommends

that all future submissions and supporting documents clearly identify the term sought for an EIP. Without this specificity, an EIP may be considered incomplete per 40 CFR 131.6. See additional comments on Revision: Reg. 2.309 – Water Quality Standards Temporary Variance regarding EIPs.

4. **Revision:** Reg. 2.106 – All Flows: Strike “All Flows - Takes into account all flows and data collected throughout the year, including elevated flows due to rainfall events.”
Justification: EPA disapproved this language and it must revert to “Storm Flows”.

EPA Comment/Recommendation: As stated in our January 24, 2008 action and described in detail in our TSD, the EPA took no action on the definition in Reg. 2.106 of “All Flows.” However, in that same action, the EPA disapproved the associated revised heading title of "All Flows Values" and associated text revision (from "storm-flow" to "all flows") in Reg. 2.503 (see response to revisions to Reg. 2.503 below). The EPA supports ADEQ’s deletion of this definition.

5. **Revision:** Reg. 2.106 – Effluent: Insert definition of “Effluent.”
Justification: “Effluent” is used several times within the regulation but is undefined. This definition is from Regulation No. 6.

EPA Comment/Recommendation: The EPA supports the inclusion of this definition as it will add clarity to subsequent provisions.

6. **Revision:** Reg. 2.106 – Storm Flows: Insert “Storm flows: Takes into account all flows and data collected throughout the year, including elevated flows due to rainfall events.”
Justification: EPA disapproved “All Flows” and it reverts back to “Storm Flows”.

EPA Comment/Recommendation: See the response to Reg. 2.503 – Turbidity below.

CHAPTER 2: ANTIDegradation POLICY

7. **EPA Comment/Recommendation:** The EPA has provided comments and recommendations on initial and subsequent drafts of the state’s Antidegradation Implementation Methodology (AIM). See **Attachment 1**. State antidegradation policy and implementation procedures must be consistent with the components detailed in 40 CFR 131.12. The functional relationship between the state’s standards/antidegradation policy and its implementation should be clear if the AIM is not included in either the water quality standards or the state’s Continuing Planning Process (CPP) document consistent with 40 CFR 130.5(b)(6).

CHAPTER 3: WATERBODY USES

Regs. 2.302 – 2.311

1. **Reg. 2.302 Designated Uses**

EPA Comment/Recommendation: For the purpose of improving transparency with the public, it would be helpful if ADEQ would consider providing a better link between designated uses listed here and the parameters used to evaluate their support. See general comment provided for Chapter 5 below.

2. **Reg. 2.308 Site Specific Criteria**

EPA Comment/Recommendation: Part (A)(2) indicates that site specific numerical values may be established based on “304(a) Guidance modified to reflect site conditions (i.e., Water Effects Ratio);” Please note that the Biotic Ligand Model (BLM) has been the EPA’s recommended approach for developing site-specific criteria for copper since 2007. This use of this approach is currently in development for various other metals as well. While the EPA will consider criteria based on a water effect ratio (WER), we will use the EPA’s *Draft Technical Support Document: Recommended Estimates for Missing Water Quality Parameters for Biotic Ligand Model* to run a BLM if it is not otherwise provided. The EPA will defer to the more protective criteria based on either the WER or BLM approach.

Although WERs can be conducted for parameters other than metals, the EPA has found that WER studies for contaminants like ammonia or cyanide have either resulted in a WER of approximately “1” or could not be successfully completed due to analytical issues. This may be the case for other §304(a) contaminants. The EPA no longer recommends use of WERs for aluminum given the difficulty in keeping it dissolved in solution at the level that will generate a LC50 for a WER study. Also, we have noted that Regulation 2 does not include aquatic life criteria for aluminum. The EPA has also commented on the use of the EPA’s †304(a) criteria recommendations in the development of WERs for parameters other than metals in response to recent proposed updates for Arkansas’s CPP.

3. **Revision: Reg. 2.309 – Water Quality Standards Temporary Variance**

This provision was amended as such:

~~A temporary variance to the water quality standards may be allowed for an existing permitted discharge facility. The variance will be for specified constituents and shall be no longer than a three year period. A water quality standards temporary variance shall be developed in accordance with and meet the requirements of 40 C.F.R. §131.14 and must be approved by the Arkansas Pollution Control and Ecology Commission and the United States Environmental Protection Agency. A variance will be considered when it is determined that a standard, including designated use, can ultimately be attained or when preliminary evidence indicates that a site specific amendment of the standards may be appropriate. A variance may be granted only to the applicant and will not apply to other discharges into the specified waterbody.~~

Justification: Simply referencing 40 C.F.R. § 131.14 eliminates confusion and clarifies the requirements of a WQS temporary variance.

EPA Comment/Recommendation: The EPA supports the ADEQ's proposed revisions updating Reg. 2.309 referencing 40 CFR 131.14 regarding temporary variance. Although states are not required to include an authorizing provision for variances in their water quality standards, such provisions can provide clarity and direction for the public/regulated community. The use of variances as defined in 40 CFR 131.14 and associated guidance could be a useful tool to be utilized as an alternative to permanent site-specific criteria modification. A variance could be particularly useful in place of an EIP (Reg. 2.105, Appendix B) given that the limiting factor that is the three-year restriction for that type of project.

CHAPTER 4: GENERAL STANDARDS

Regs. 2.401 – 2.410

4. **EPA General Comment on Chapter 4:** We presume that each of the general standards provisions in this chapter apply to the protection of all uses in all waters of the state. As such, we recommend that the opening provision to Chapter 4 clarify that, with the exception of Biological Integrity, each of the following general standards provisions apply to all applicable uses in all waters of the state. This will provide added transparency as to the affected uses in those cases where impairments are identified for these general parameters.
5. **Revision:** Reg. 2.404: Amended as follows:

Reg-Rule 2.404 Mixing Zones~~RESERVED~~

~~Where mixing zones are allowed, the effects of wastes on the receiving stream shall be determined after the wastes have been thoroughly mixed with the mixing zone volume. Outfall structures should be designed to minimize the extent of mixing zones to ensure rapid and complete mixing.~~

~~For aquatic life toxic substances in larger streams (those with Q7-10 flows equal to or greater than 100 cfs), the zone of mixing shall not exceed 1/4 of the cross-sectional area and/or critical flow volume of the stream. The remaining 3/4 of the stream shall be maintained as a zone of passage for swimming and drifting organisms, and shall remain of such quality that stream ecosystems are not significantly affected. In the smaller streams (Q7-10 flows less than 100 cfs) because of varying local physical and chemical conditions and biological phenomena, a site-specific determination shall be made on the percentage of river width necessary to allow passage of critical free-swimming and drifting organisms so that negligible or no effects are produced on their populations. As a guideline, no more than 2/3 of the cross-sectional area and/or critical flow volume of smaller streams should be devoted to mixing zones thus leaving at least 1/3 of the cross-sectional area free as a zone of passage.~~

~~4-2~~

~~Mixing zones are not allowed for the parameters of bacteria or oil and grease, or where the background flow is less than the critical flow or where the background concentration of a waste parameter exceeds the specific criteria for that waste parameter. In lakes and reservoirs the size of mixing zones shall be defined by the Department Division on an individual basis, and the area shall be kept at a minimum.~~

~~Mixing zones shall not prevent the free passage of fish or significantly affect aquatic ecosystems.~~

~~A mixing zone shall not include any domestic water supply intake.~~

Justification: None provided

EPA Comment/Recommendation: The federal regulation at 40 CFR 131.13 indicates that states “may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances.” We interpret any such discussion of mixing zones as discretionary policy information. As such, the above mixing zone provision may be removed without further review by the EPA. However, the EPA recommends that this and similar water quality implementation policy provisions be included in the state of Arkansas’s *Rule 6, Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES)*.

6. **Revision:** Reg. 2.409: Amended as follows:

~~Discharges shall not be allowed into any waterbody which, after consideration of the zone of initial dilution, the mixing zone, and critical flow conditions, will~~ Toxic substances that may cause toxicity to human, animal, plant, or aquatic biota or interfere with normal propagation, growth, and survival of aquatic biota shall not be allowed into any waterbody.

Justification: None provided.

EPA Comment/Recommendation: This provision maintains the prohibition on discharges of toxic substances that may impact aquatic biota, but removes explicit statement requiring consideration of zone of initial dilution, mixing zone, or critical flow conditions. As noted in 40 CFR 131.13, states “may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flow and variances.” We interpret any such discussion of the above considerations as discretionary policy information. As such, the above information with respect to zone of initial dilution, mixing zone and critical flow conditions may be removed without further review by the EPA. However, the EPA recommends that this and similar water quality implementation policy provisions be included in the state of Arkansas’s *Rule 6, Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES)*.

However, the new sentence in this provision indicates that toxic substances that *may* cause toxicity are not allowed in the water. This suggests that any detection of any of these substances may cause a violation. This could lead to the interpretation that no dischargers can have these components in their effluent discharge because that would lead to detectible results which would be a violation. See comment on similar provision in Reg. 2.508 below.

7. **Revision** Reg. 2.410: Insert a comma after “grease,” insert a comma after “globules,” strike “or,” insert a comma after “residue,” insert a semicolon after “surface,” strike “or,” insert a semicolon after “waterbody.”

Justification: Created a list to correct grammar.

EPA Comment: The EPA recommends replacing the term “associated biota” with “aquatic life” as it has previously been defined, or otherwise define the term “associated biota”.

CHAPTER 5: SPECIFIC STANDARDS

Regs. 2.501 – 2.512

8. EPA General Comments on Chapter 5:

A. For purposes of providing greater transparency to the public, ADEQ may consider providing a clearer link between the parameters described in this chapter and those uses listed in Reg. 2.302, including:

- i. 2.502 Temperature (e.g. criteria listed by waterbody type, could also include designated use?)
- ii. 2.503 Turbidity
- iii. 2.504 pH
- iv. 2.506 Radioactivity
- v. 2.508 Toxic Substances (implied aquatic life use, are there other uses or specific tiers of aquatic life use to which this applies?)
- vi. 2.510 Oil and Grease (implied aquatic life use, are there other uses or specific tiers of aquatic life use to which this applies?)
- vii. 2.511 (A) Site Specific Mineral Quality Criteria

B. The applicable duration and/or frequency for the criteria for several parameters within this section have been removed or are not described. Including this information allows for greater transparency and minimizes variations in interpretation. Such information is also a critical part of any criterion as it may define, change, or establish the level of protection to be applied in attainment decisions, thereby affecting existing standards implemented under section 303(c) of the Act. For example:

- i. 2.502 Temperature (duration and frequency)
- ii. 2.504 pH (duration and frequency)
- iii. 2.505 Dissolved oxygen (frequency)
- iv. 2.508 Toxic substances (duration and frequency)
- v. 2.511 (A) Site Specific Mineral Quality Criteria (duration and frequency)

See additional EPA comments below on specific parameters.

9. **Revision:** Reg. 2.502: First paragraph regarding temperature criteria implementation removed as follows:

~~For purposes of determining effluent limits, Heat shall not be added to any waterbody in excess of the amount that will elevate the natural temperature, outside the mixing zone, by~~

~~more than 5°F (2.8°C) based upon the monthly average of the maximum daily temperatures measured at mid depth or three feet (whichever is less) in streams, lakes, or reservoirs.~~

Justification: None provided.

EPA Comment/Recommendation: The EPA supports the deletion of the phrase “measured at mid-depth or three feet (whichever is less)”. See the EPA’s response to ADEQ’s removal of “1.0 meter depth” language under Rule 2.502 below. However, consistent with the EPA’s 4-part test for determining new or revised water quality standards (see FAQ #4 at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>), the remaining deletions have the effect of revising applicable water quality standard by removing provisions identifying the magnitude (variability above background) and duration (monthly average of maximum daily temperatures) of criteria necessary to support a designated use. To support these deletions, the EPA would need as part of the state must submit supporting justification for why deleting these provisions are scientifically defensible and protective of the designated use in order for the EPA to approve them consistent with 40 CFR 131.5.

10. **Revision:** Reg. 2.502: Strike “(applicable at 1.0 meter depth).”

Justification: This language was not approved by EPA in a 2016 Technical Support Document and is therefore not effective for Clean Water Act purposes and should be removed. This addition was proposed in the previous triennial review to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: In its October 31, 2016 action, the EPA did not act on the “applicable at 1.0-meter depth” language as noted in ADEQ’s justification, the EPA took no action because the phrase implies that criteria for a specific parameters would only apply at 1.0-meter depth. Although likely intended as directing assessment, this limitation means that a criterion would not apply at other depths. The EPA has long held the position that water quality criteria apply throughout the water entire column. The EPA supports the modification here and in subsequent provisions that refer to the 1.0-meter depth limitation.

11. **Revision:** Reg. 2.503: First paragraph amended as follows:

“There shall be no distinctly visible increase in turbidity ~~of receiving in~~ waters of the state attributable to ~~discharges or in-stream~~ anthropogenic activities.”

Justification: None provided.

EPA Comment/Recommendation: The revised language generalizes but does not change the meaning of the statement. The EPA supports this change.

12. **Revision:** Reg. 2.503: Strike “all” and replace with “storm” in the last sentence of the first paragraph and in the table.

Justification: The revision from “storm” to “all” flows was disapproved by the EPA in 2008 and upheld after some discussion in the 2016 Technical Support Document. As a result, the language must revert to original.

EPA Comment/Recommendation: The proposed revisions to the opening sentence in Reg. 2.503 do not alter the meaning of the sentence and are acceptable.

As part of the Commission's 2007 triennial "Phase II" revisions, the heading "Storm-Flow Values" was replaced with a new heading titled "All Flows Values", the term "storm flows" in the text of Regulation 2.503 was revised to read "all flows" and a new definition in Regulation 2.106 for "All Flows." The EPA disapproved these revisions because they modified the application of the less stringent turbidity criteria in a way that is inconsistent with the original intent of deriving storm flow criteria. Using this approach may also result in the potential misidentification of a water in the state's Integrated Water Quality Monitoring Assessment Report (CWA §305(b)/303(d) integrated report) as supporting its applicable fisheries designated use when it may actually be impaired due to turbidity as detailed in our January 28, 2008 action and supporting Record of Decision (ROD). Reverting to the previously approved column heading "Storm-Flow Values" without addressing this underlying problem could potentially be seen as simply renaming the same problem making it difficult for the EPA to approve these revisions.

The new definition in Reg. 2.106 of "*Storm flows: Takes into account all flows and data collected throughout the year, including elevated flows due to rainfall events*" provides some context to how storm flow turbidity criteria are presently assessed. However, it remains overly expansive (i.e. still references "all flows"), and does not provide a definitive criterion, or criteria, by which storm flows are differentiated from base flows. A clear definition of storm flows is important in that it allows the assessor to make a sound judgment as to which criterion should apply under a given flow condition. At present, the state's assessment methodology for turbidity provides two approaches: one for baseflow, in which all turbidity data collected between May and October are applied against baseflow criteria, and one for storm flow, in which all turbidity data collected under any flow scenario across all seasons are applied against storm flow criteria. The former approach assumes that reduced flows occur most frequently during the summer and early fall months. It is questionable whether this would be appropriate every year, particularly during wet years when stormwater turbidity measurements may be compared to baseflow turbidity criteria, thereby raising the possibility of unnecessarily identifying a higher number of exceedances. Alternatively, the latter approach appears to fall back to assessing turbidity under all flows, as opposed to storm flows only, thereby discounting the original intent of the storm flow criteria to evaluate turbidity increases after storm events. As noted in the EPA's 2008 ROD, storm flow criteria were based on a 90th percentile of historic turbidity data in each ecoregion, ostensibly representing turbidity conditions under high (or relatively high) flow conditions, likely storm flow related, in which turbidity becomes more elevated. Assessing year-round turbidity data against the storm flow criteria, irrespective of flow condition, potentially biases that assessment if there are a large number of baseflow turbidity measurements in the dataset, thereby reducing the potential of finding >25% of samples exceeding the stormflow criteria. When using a binomial approach in assessments, every measurement is important, whether under baseflow or storm flow conditions and to apply an inappropriate criterion to just a few turbidity measurements can lead to significant decision error. The above issues point to the need for a clear definition of both baseflows and storm flows in the

water quality standards and to apply the criteria to turbidity measurements based on field-observed flow conditions.

The EPA understands that part of the issue with assessing storm flow-based criteria is the lack of flow data available at the time turbidity measurements are made, making the judgment of which criteria to apply more onerous. As a possible stopgap, in lieu of empirical flow measurement during every sampling event, the EPA recommends that ADEQ consider a flow estimation technique, such as the use of flow severity guidelines (**Attachment 2**), that allows for the field identification of flow conditions that could be used by assessors to more appropriately apply the dichotomous flow-based criteria (this approach is obviously most appropriate for use in rivers and streams, but could also be applied to tributaries of lakes and reservoirs for the same purpose). While the use of such estimation techniques may be subjective among different observers and may require some degree of calibration among field staff prior to widespread use, the resulting information would perhaps provide a more accurate assessment of actual flow conditions as compared to the presently broad, and possibly biased, assumptions about the seasonality of flow and applicability of criteria. Upon settling on a particular set of flow observation categories and the appropriate cutoffs among these categories, the definitions of baseflow and stormflow should be incorporated into the water quality standards under Reg. 2.106 based on ADEQ's evaluation of which flow categories best represent baseflow versus stormflow.

The comments outlined above are intended to further the discussion between the EPA and the ADEQ on this topic and to gain better insights into how the ADEQ's assessment approach evolved from the original derivation of these criteria. It is important that the ADEQ provide supporting information to further clarify how the Department's assessment approach applies baseflow and storm flow turbidity criteria and explain why this approach is appropriate to support the proposed revised heading title and associated definition.

13. **Revision:** Reg. 2.503: Strike "(applicable at 1.0 meter depth)" within the table.
Justification: This language was not approved by EPA in a 2016 Technical Support Document and is therefore not effective for Clean Water Act purposes and should be removed. This addition was proposed in the previous triennial review to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: See comments for Reg. 2.502 above. The EPA supports this revision.

14. **Revision:** Reg. 2.504: Strike "For lakes, the standards are applicable at 1.0 meter depth."
Justification: This language was not approved by EPA in a 2016 Technical Support Document and is therefore not effective for Clean Water Act purposes and should be removed. This addition was proposed in the previous triennial review to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: See comments for Reg. 2.502 above. The EPA supports this revision.

15. **Revision:** Reg. 2.504: Second paragraph was removed as follows:

~~“As a result of waste discharges, the pH of water in streams or lakes must not fluctuate in excess of 1.0 standard unit over a period of 24 hours.”~~

Justification: None provided.

EPA Comment/Recommendation: Consistent with EPA’s 4-part test for determining new or revised water quality standards (see FAQ #4 at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>), these deletions have the effect of revising applicable water quality standards by removing provisions identifying the magnitude (variability of pH no greater than 1 standard unit) and duration (24 hours) of criteria necessary to support a designated use. To support these deletions, the state must submit supporting justification for why deleting these provisions are scientifically defensible and protective of the designated use in order for the EPA to approve them consistent with 40 CFR 131.5.

16. **Revision:** Reg. 2.505: Multiple paragraphs at end of “Rivers and Streams” section were removed as follows:

~~“For purposes of determining effluent discharge limits, the following conditions shall apply:~~

~~(A) The primary season dissolved oxygen standard is to be met at a water temperature of 22°C (71.5°F) and at the minimum stream flow for that season. At water temperatures of 10°C (50°F), the dissolved oxygen standard criteria is 6.5 mg/L.~~

~~(B) During March, April and May, when background stream flows are 15 cfs or higher, the dissolved oxygen standard is 6.5 mg/L in all areas except the Delta Ecoregion, where the primary season dissolved oxygen standard criteria will remain at 5 mg/L.~~

~~(C) The critical season dissolved oxygen standard is to be met at maximum allowable water temperatures and at Q7-10 flows. However, when water temperatures exceed 22°C (71.6°F), a 1 mg/L diurnal depression will be allowed below the applicable critical standard criteria for no more than 8 hours during any 24-hour period.”~~

Justification: None provided.

EPA Comment/Recommendation: Consistent with the EPA’s 4-part test for determining new or revised water quality standards (see FAQ #4 at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>), these deletions have the effect of revising applicable water quality standards by removing provisions identifying an alternative criterion magnitude under varying temperature and/or flow conditions (identifies 6.5 mg/L as a criterion for determining limits, which was not otherwise listed in the preceding criteria table), as well as maximum allowable magnitude of diurnal DO depression (no more than 1 mg/L below applicable criteria)

over a given duration (no more than 8 hours over 24 hours) necessary to support a designated use. To support these deletions, the state must submit supporting justification for why deleting these provisions are scientifically defensible and protective of the designated use in order for the EPA to approve them consistent with 40 CFR 131.5.

17. **Revision:** Reg. 2.505: Two paragraphs at end of “Lakes and Reservoirs” section were removed as follows:

~~“Effluent limits for oxygen demanding discharges into impounded waters are promulgated in Arkansas Pollution Control and Ecology Commission Regulation Rule No. 6, Regulations Rules for State Administration of the National Pollutant Discharge Elimination System (NPDES).~~

~~However, the Commission may, after full satisfaction of the intergovernmental coordination and public participation provisions of the State of Arkansas Continuing Planning Process, establish alternative limits for dissolved oxygen in lakes and reservoirs where studies and other relevant information can demonstrate that predominant ecosystem conditions may be more accurately reflected by such alternate limits; provided that these limits shall be compatible with all designated beneficial uses of named lakes and reservoirs.”~~

Justification: None provided.

EPA Comment/Recommendation: 40 CFR 131.13 indicates that states “may, at their discretion, include in their State standards, policies generally affecting their application and implementation, such as mixing zones, low flows and variances.” The above language constitutes agency policy with respect to calculation of alternate permit limits where it can be demonstrated that this is appropriate. Such language does not constitute a water quality standard. The EPA supports this change. However, the EPA recommends that this and similar water quality implementation policy provisions be included in the state of Arkansas’s *Rule 6, Regulations for State Administration of the National Pollutant Discharge Elimination System (NPDES)*.

18. **Revision:** Reg. 2.505: Strike “applicable at 1.0 meter depth.”

Justification: This language was not approved by EPA in a 2016 Technical Support Document and is therefore not effective for Clean Water Act purposes and should be removed. This addition was proposed in the previous triennial review to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: See comments for Reg. 2.502 above. The EPA supports this revision.

19. **Revision:** Reg. 2.507: Insert “Secondary contact use is assumed in all watersheds” in first paragraph.

Justification: Secondary contact should still be protected throughout the year if primary contact use is not attainable on waterbody for any reason.

EPA Comment/Recommendation: It's not clear from the context when read in its entirety if this provision means that secondary contact only applies to all watersheds < 10 mi², or if secondary contact will apply to all watersheds regardless of size? Please explain.

20. **Revision:** Reg. 2.507: The last sentence of the first paragraph was removed as follows:
~~“No mixing zones are allowed for discharges of bacteria.”~~

Justification: None provided.

EPA Comment/Recommendation: See comments regarding implementation of water quality standards in mixing zones for Reg. 2.404 above. The EPA supports this revision.

21. **Revision:** Reg. 2.507: Insert “or fecal coliform” after “E. coli” in second paragraph.

Justification: This addition clarifies that the individual sample language applies to either *E. coli* or fecal coliform data.

EPA Comment/Recommendation: With regard to Recreational Water Quality Criteria (RWQC), the ADEQ has long used the indicator fecal coliform and associated criteria for the protection of primary contact use. The EPA has discouraged the use of total and fecal coliforms as indicators of fecal contamination since 1986 because they are not reliable indicators of illness to swimmers. As far back as 1986, the EPA clearly stated the Agency's expectations for states to transition to indicators that are superior to fecal coliforms. In 1986 and again in 2012, the EPA, pursuant to CWA § 304(a), issued recommended RWQC to protect the public from exposure to harmful levels of pathogens while participating in primary contact recreation activities such as swimming. The EPA recommended RWQC are based on two bacterial indicators of fecal contamination - *E. coli* or enterococci in fresh waters, and enterococci in marine waters. As a result, the EPA recommends that the proposed revision be changed to “the below listed applicable criteria for *E. coli* shall not be exceeded...” and delete fecal coliform as an indicator from both the second paragraph the table of applicable criteria. It will be difficult for the EPA to approve a modification of a provision that includes such outdated indicator and criteria as protective of contact designated uses.

22. **Revision:** Reg. 2.507: Insert “individual” in the second paragraph before “samples.”

Justification: Insertion of this language clarifies that the 25% exceedance rate and the eight (8) sample minimum applies only to Individual Sample Criteria, not the geometric mean.

EPA Comment/Recommendation: The EPA supports this revision as it relates to the indicator *E. coli*.

23. **Revision:** Reg. 2.507: Strike “2” as a footnote marker under the “Primary Contact” and “Secondary Contact” headings of the table for ERW, ESW, NSW, Reservoirs, Lakes.

Justification: The associated footnote pertaining to 1.0-meter depth was not approved by EPA and should be removed. This addition was proposed in the previous triennial review

to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: See comments for Reg. 2.502 above. The EPA supports this revision.

24. **Revision:** Reg. 2.507: Strike the footnote “Applicable at 1.0-meter depth in Reservoirs and Lakes.” Insert “(RESERVED).”

Justification: This language was not approved by EPA in a 2016 Technical Support Document and is therefore not effective for Clean Water Act purposes and should be removed. This addition was proposed in the previous triennial review to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: See comments for Reg. 2.502 above. The EPA supports this revision.

25. **Revision:** Reg. 2.507: Footnote 5 – Strike “October 1 to April 30”. Replace with “Year-round.”

Justification: This clarifies the intent that Secondary Contact Recreation is year-round. The Reg. 2.302 definition of Secondary Contact Recreation does not limit the use to only part of the year.

EPA Comment/Recommendation: Recommend that the primary and secondary contact timeframes be listed in 2.106 (Definitions) or 2.302 (Designated Uses).

26. **Revision:** Reg. 2.508: The first sentence of the first paragraph was amended as follows: “Toxic substances ~~shall not be present in receiving waters, after mixing, in such quantities as to be toxic~~ that may cause toxicity to human, animal, plant or aquatic life or to interfere with the normal propagation, growth and survival of the indigenous aquatic biota shall not be allowed into any waterbody.”

Justification: None provided.

EPA Comment/Recommendation: The removal of the phrase “in such quantities” from this provision may result in a more sweeping interpretation than is perhaps expected. The new sentence in this provision indicates that toxic substances that may cause toxicity are not allowed in the water. This means that any detection of these substances may cause a violation. This could lead to the interpretation that no discharger can have these components in their effluent because that would lead to detectible results which would be a violation.

27. **Revision:** Reg. 2.508: The second through fifth sentences of the first paragraph were removed as follows: “~~Acute toxicity standards apply outside the zone of initial dilution. Within the zone of initial dilution acute toxicity standards may be exceeded but acute toxicity may not occur. Chronic toxicity and chronic numeric toxicity standards apply at, or beyond, the edge of the mixing zone. Permitting of all toxic substances shall be in~~

accordance with the toxic implementation strategy found in the State of Arkansas Continuing Planning Process.”

Justification: None provided

EPA Comment/Recommendation: See comments regarding inclusion of implementation language in water quality standards, including its relationship to mixing zones, for Reg. 2.404 above. The EPA supports this revision.

28. Reg. 2.508 Toxic Substances:

EPA Comment/Recommendation: 40 CFR § 131.20(a) was amended as part of the EPA's 2015 water quality standards regulation revision. The amended regulation requires any state that chooses not to adopt new or revised criteria for any parameters for which the EPA has published new or updated criteria recommendations under CWA § 304(a) to explain its decision when reporting the results of its triennial review to the EPA. The goal of this revised provision is to ensure public transparency about state water quality standards decisions. The EPA is including this item as a reminder to include this information, if applicable, in any triennial review submittal to the EPA.

The EPA's "Supplemental Information for Water Quality Standards Regulatory Revisions Final Rule: New or Updated CWA Section 304(a) Criteria Recommendations Published since May 30, 2000" (2015) provides a list of the new or updated CWA section 304(a) criteria recommendations published between May 30, 2000 and the publication of the EPA's 2015 water quality standards regulation revision. Please note that the more recently published national 304(a) recommended aquatic life criteria for cadmium (2016), selenium (2016 – Freshwater), aluminum (2018-Freshwater) and cyanotoxins (2019-Freshwater) are not listed in this table.

ADEQ should evaluate these criteria recommendations and provide the required explanation for any updated federal criteria not adopted as part of this triennial review. There is no required format in which to provide these explanations. However, two examples have been provided (**Attachment 3**) from another Region 6 state that may be helpful as an example.

29. Reg 2.508 Toxic Substances - footnote:

EPA Comment/Recommendation: A footnote provided for the "Dissolved Metals" table indicates that "These values may be adjusted by a site-specific Water Effects Ratio (WER)". Please note that the Biotic Ligand Model (BLM) has been the EPA's recommended approach for developing site-specific criteria for copper since 2007. This approach is currently in development for various other metals as well. While the EPA will consider criteria based on a water effect ratio (WER), we will use the EPA's missing parameters guidance to run a BLM if it is not otherwise provided. The EPA will defer to the more protective criteria based on either the WER or BLM approach.

As noted in our previous comment on Reg. 2.308, the EPA no longer recommends use of WERs for aluminum given the difficulty in keeping it dissolved in solution at the level that

will generate a LC50 for a WER study. As noted previously, Reg. 2 does not include aquatic life criteria for aluminum.

30. **EPA Comment on Reg. 2.509(A):** This rule states: “Materials stimulating algal growth shall not be present in concentrations sufficient to cause objectionable algal densities or other nuisance aquatic vegetation or otherwise impair any designated use of the waterbody.” Does the phrase “any designated use of the waterbody” mean that nutrients can be used to determine support for any of the listed designated uses in Rule 2.302?
31. **Revision:** Reg. 2.509(B): The last two paragraphs and table were removed from this section as follows: ~~“All point source discharges into the watershed of waters officially listed on Arkansas’s impaired waterbody list (303(d)) with phosphorus as the major cause shall have monthly average discharge permit limits no greater than those listed below. Additionally, waters in nutrient surplus watersheds as determined by Act 1061 of 2003 Regular Session of the Arkansas 84th General Assembly as set forth in Ark. Code Ann. § 15-20-1104, and subsequently designated nutrient surplus watersheds may be included under this Reg. Rule if point source discharges are shown to provide a significant phosphorus contribution to waters within the listed nutrient surplus watersheds.”~~

<u>Facility Design Flow — mgd</u>	<u>Total Phosphorus discharge limit — mg/L</u>
= or > 15	Case by case
3 to < 15	1.0
1 to < 3	2.0
0.5 to < 1.0	5.0
< 0.5	Case by Case

~~For discharges from point sources which are greater than 15 mgd, reduction of phosphorus below 1 mg/L may be required based on the magnitude of the phosphorus load (mass) and the type of downstream waterbodies (e.g., reservoirs, Extraordinary Resource Waters). Additionally, any limits listed above may be further reduced if it is determined that these values are causing impairments to special waters such as domestic water supplies, lakes or reservoirs, or Extraordinary Resource Waters.~~

Justification: None provided.

EPA Comment/Recommendation: The deleted language describes permit limits for total phosphorus that are not water quality criteria, and do not appear to directly implement nutrient-related criteria (chlorophyll a and Secchi depth) found in the water quality standards. These are design flow-based limits implemented when total phosphorus is identified as a cause of impairment in waters to which a point source discharge occurs. The EPA supports this revision. However, please note that the state’s CPP refers to this provision. Is this being incorporated into Rule 6? If so, the CPP reference needs to be updated.

32. **Revision:** Reg. 2.510: Insert a comma after “grease”, strike “receiving” before “waters” and insert “of the state” after “waters”, insert a comma after “globules,” strike “or,” insert

a comma after “residue,” strike a comma after “surface,” insert a semicolon after “surface,” strike “or,” insert a semicolon after “watercourses.”

Justification: Created a list to correct grammar.

EPA Comment/Recommendation: Specification of applicability of oil and grease water quality standards to all waters of the state, rather than only receiving waters, is acceptable.

33. **Revision:** Reg. 2.510: Strike following sentence: “~~No mixing zones are allowed for discharges of oil and grease.~~”

Justification: None provided.

EPA Comment/Recommendation: See comments regarding inclusion of implementation language in water quality standards, including as it may relate to mixing zones, for Reg. 2.404 above. The EPA supports this revision. As noted in our prior comment to Reg. 2.410, we recommend replacing the term “associated biota” with “aquatic life” or define the term “associated biota”.

34. **Reg. 2.511(A) Site Specific Mineral Quality Criteria:**

EPA Comment/Recommendation: In its 2007 triennial “Phase II” revisions, the Commission revised Reg. 2.511(A) adding and striking the following language (denoted by underline/strikeout text):

“Mineral quality shall not be altered by municipal, industrial, other waste discharges or instream activities so as to interfere with designated uses. The following limits apply to the streams indicated and represent the monthly average concentrations of chloride (Cl⁻), sulfate (SO₄²⁻) and total dissolved solids (TDS) ~~not to be exceeded in more than one (1) in ten (10) samples collected over a period of not less than 30 days or more than 360 days.~~”

As detailed in its January 24, 2008 action and supporting TSD, the EPA disapproved the striking of language referring to exceedance rates based on a lack of supporting documentation as required by 40 CFR 131.6 (b) and (f) and methods, including methods and analysis conducted that would allow the EPA to determine the adequacy and scientific basis for this revision. The EPA specified in that action that the previously approved language in Reg. 2 (April 23, 2004) remains in effect for CWA purposes. The ADEQ’s Assessment Methodology (2018) specifies that site-specific mineral criteria listed in Reg. 2.511(A) means that assessments must be based on a monthly average of site-specific values for chlorides, sulfates, and/or TDS not to be exceeded in more than one (1) in ten (10) samples collected over not less than 30 days or more than 360 days. Given that the EPA disapproved the removal of the language specified above, using the 2018 Assessment Methodology as currently written is inconsistent with Reg. 2.511(A) given that this language remains in effective for CWA purposes.

35. **Revision:** Reg. 2.511(A): Bayou Meto: Revise as follows:

Bayou Meto (Rocky Branch to Pulaski/Lonoke
county line ~~Bayou Two Prairie~~)

Bayou Meto (~~mouth to Bayou Two Prairie~~)
(Pulaski/Lonoke county line to mouth)

Justification:

- A 2007 3rd party rulemaking (minute order 04-41) states “modify the dissolved mineral standards for Bayou Meto from the point it crosses the Pulaski/Lonoke County line to the confluence with the Arkansas River as follows: sulfates from 37 mg/l to 45 mg/l and chlorides from 64 mg/l to 95 mg/l.”
- The October 26, 2007, 2007 version of Reg. 2 submitted to EPA for approval states “Bayou Meto (mouth to Bayou Two Prairie)”.
- EPA noted in an August 5, 2008 TSD that the reach description in the minute order and in Reg. 2 did not match. EPA’s August 5, 2008 TSD stated approval for “Bayou Meto (mouth to Bayou Two Prairie).”
- The 2013 triennial review attempted to clarify the original 3rd party rulemaking’s intended reach and revised the regulation to state “Bayou Meto (mouth to Pulaski/Lonoke county line).”
- EPA’s October 31, 2016 TSD made no statement of this revision (ie approve, disapprove, no action).
- Additionally, there are two sets of criteria noted in the reg for part of Bayou Meto.
- Therefore the 2016 clarification is once again being made in addition to clarification of the criteria applicable to the upper reach “Bayou Meto (Rocky Branch to Pulaski/Lonoke county line).”

EPA Comment/Recommendation: The proposed revisions are specific to “Bayou Meto to Polaski/Lonoke county line” and “Bayou Meto (Pulaski/Lonoke county line).” These revisions do not include Bayou Two Prairie. As a result, the EPA does not have any concerns with revising these descriptors in Reg. 2.511(A).

The two following entries that specify the exclusion of those portions of Bayou Two Prairie that have the ERW designated use and appear consistent with the EPA’s August 5, 2008 action disapproving site-specific chloride and sulfate criteria applicable to Bayou Two Prairie adjacent to the Smoke Hole Natural Area as inconsistent with 40 CFR § 131.12(a)(3). The ecoregion criteria of 48 mg/L and 37.3 mg/L for chloride continue to apply to the portion of Bayou Two Prairie adjacent to Smoke Hole Natural Area.

36. **Revision:** Reg. 2.511 (A): Close parentheses on “Bayou Two Prairie (Pulaski/Lonoke county line to.... Smoke Hole Natural Area)”

Justification: Punctuation correction.

EPA Comment/Recommendation: Please note the following additional corrections:

- A. Please strike “†” on all values for Poteau River from confluence of Unnamed trib to Scott County Road 59 and Unnamed trib from Tyson-Waldron Outfall 001 to confluence with the Poteau River. The listed criteria were approved by the EPA on June 2, 2020 and are now applicable for CWA purposes.

- B. Please update the sulfate criterion for Stennitt Creek from Brushy Creek to Spring River to reflect that approved by the EPA on June 3, 2020 (43mg/L). Similarly, please update the table in this provision to reflect those minerals criteria approved on the same date for Unnamed Tributary of Brushy Creek from Vulcan Construction Materials Outfall 001 to Brushy Creek and Brushy Creek from Unnamed Tributary to Stennitt Creek.
- C. Please strike “†” on all values for Town Branch from Point of Discharge of the Huntsville WWTP downstream to the confluence with Holman Creek and Holman Creek from the confluence with Town Branch downstream to the confluence with War Eagle Creek. The listed criteria were approved by the EPA on May 22, 2020 and are now applicable for CWA purposes.

37. **Revision:** Reg. 2.511(B): Amended the following sentence as follows: “The values listed in the table below are not intended ~~nor will these values~~ to be used by the ~~Department~~ Division to evaluate attainment of the water quality standards for assessment purposes.
Justification: None provided.

EPA Comment/Recommendation: In its August 31, 2016 action the EPA did not approve certain portions of Reg. 2.511(B) including the entire sentence referred to. Based on that action, this sentence is not, nor has it ever been, effective for CWA purposes. The EPA approved the criteria referred to as “values” as water quality standards pursuant to the CWA §303(c) and they are effective for CWA purposes. The criteria themselves were based on the significant work that the ADEQ did in the development of its Physical, Chemical, and Biological Characteristics of Least-Disturbed Streams in Arkansas’s Ecoregions, Vol. 2 and 2 (ADEQ, 1987). The stated purpose of these documents was to provide a sound scientific basis for the development, review, and adoption of water quality standards.

The EPA looks forward to continuing its work with ADEQ to implement its October 27, 2017 Mineral Criteria Development Strategy, including upcoming milestones of presenting proposed revised mineral criteria to the Mineral Stakeholder workgroup and presenting proposed multi-metric biological indices (IBI) and tiered aquatic life uses (TALU) for the Ouachita Mountain ecoregion and expanding this effort in other ecoregions. The EPA also considers the collaborative effort in the current NSTEPS project, as well as RARE project related to conductivity, to be promising.

38. **Revision:** Reg. 2.511(C): Strike “For lakes and reservoirs applicable at 1.0 meter depth.”
Justification: This language was not approved by EPA in a 2016 Technical Support Document and is therefore not effective for Clean Water Act purposes and should be removed. This addition was proposed in the previous triennial review to clarify assessment for lakes. This language is now contained in the Assessment Methodology for the 305(b) report.

EPA Comment/Recommendation: See comments for Reg. 2.502 above. The EPA supports this revision.

39. **Revision:** Reg. 2.512(D): Strike sentence as follows: “~~For permitted discharges, the daily maximum or seven-day average permit limit shall be calculated using the four-day average value described above as an instream value, after mixing and based on a season when fish early life stages are present and a season when fish early life stages are absent.~~”

Justification: None provided.

EPA Comment/Recommendation: This provision described the criteria (and their seasonality) being used as a basis for calculating permit limits but did not specifically describe how these calculations would be made, nor changed the protectiveness of the criteria. This provision is not a water quality standard. See comments regarding inclusion of implementation language in water quality standards for Reg. 2.404 above. The EPA supports this revision. However, the removal of the first sentence creates some uncertainty as to what pH and temperature are being used for: the determination of ammonia criteria for assessment as well as the derivation of permit limits? This should be clarified.

Also, the EPA requests more information about how the pH data are obtained. When was the last time data were collected to determine the ecoregion mean value?

APPENDIX A

40. **Revision:** Appendix A, throughout: The following footnotes were removed from the Site Specific Criteria Variations tables for each ecoregion:

“*Increase over natural temperatures may not be more than 2.8°C (5°F).

**At water temperatures ” 10°C or during March, April and May when stream flows are 15 cfs and greater, the primary season dissolved oxygen standard will be 6.5 mg/L. When water temperatures exceed 22°C, the critical season dissolved oxygen standard may be depressed by 1 mg/L for no more than 8 hours during a 24-hour period.”

Justification: None provided.

EPA Comment/Recommendation: For the deleted temperature provision: consistent with the EPA’s 4-part test for determining new or revised water quality standards (see FAQ #4 at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>), these deletions have the effect of revising applicable water quality standards by removing provisions identifying the magnitude (variability above background) of criteria necessary to support a designated use. To support these deletions, the EPA would need as part of the state’s submission a supporting justification for why deleting these provisions is scientifically defensible and protective of the designated use in order to approve them.

For the deleted DO provision: consistent with the EPA’s 4-part test for determining new or revised water quality standards (see FAQ #4 at <https://www.epa.gov/sites/production/files/2014-11/documents/cwa303faq.pdf>), these deletions have the effect of revising applicable water quality standards by removing

provisions identifying an alternative criterion magnitude under varying temperature and/or flow conditions (identifies 6.5 mg/L as a criterion, which was not otherwise listed in the preceding criteria table in Rule 2.505), as well as maximum allowable magnitude of diurnal DO depression (no more than 1 mg/L below applicable criteria) over a given duration (no more than 8 hours over 24 hours) necessary to support a designated use. To support these deletions, the EPA would need as part of the state's submission a supporting justification for why deleting these provisions is scientifically defensible and protective of the designated use in order to approve them.

41. **Appendix A - Site Specific Designated Use Variations for Ozark Highlands Table**

EPA Comment/Recommendation: The footnote states “† Not applicable for clean water act purposes until approved by EPA.” Please note that the EPA approved the removal of the Domestic Water Supply Uses for both Holman Creek and Town Branch on May 22, 2020. This footnote, and the “†” symbols, can be removed from this table. In addition, the EPA approved the removal of Domestic Water Supply uses on June 3, 2020 for Unnamed Tributary of Brushy Creek from Vulcan Construction Materials Outfall 001 to Brushy Creek and Brushy Creek from Unnamed Tributary to Stennitt Creek. This could be reflected in the table above or below Stennitt Creek.

42. **Revision:** Appendix A-OH: Strike “all” and insert “storm” under the turbidity heading within the table.

Justification: The revision from “storm” to “all” flows was disapproved by EPA in 2008 and upheld after some discussion in the 2016 Technical Support Document. As a result, the language must revert to original.

EPA Comment/Recommendation: As noted in the response to Reg. 2.503 above, the EPA supports this revision.

43. **Revision:** Appendix A-OH: Strike the “†” footnote indicator from the Crooked Creek and White River entries under the Site-specific Criteria Variations Supported by Use Attainability Analysis heading.

Justification: This footnote is no longer valid for these entries as EPA has approved the site-specific criteria.

EPA Comment/Recommendation: The EPA supports this revision. Likewise, the “†” footnote indicator can also be removed from the Holman Creek and Town Branch entries. The listed criteria for these waters were approved by the EPA on May 22, 2020.

44. **Appendix A - Site Specific Criteria Variations for Ozark Highlands Table**

EPA Comment/Recommendation: In addition to TDS, please update to reflect the sulfate criterion for Stennitt Creek from Brushy Creek to Spring River that was approved by the EPA on June 3, 2020 (43 mg/L). Similarly, please update this table to reflect those new minerals criteria approved on the same date for Unnamed Tributary of Brushy Creek

from Vulcan Construction Materials Outfall 001 to Brushy Creek and Brushy Creek from Unnamed Tributary to Stennitt Creek.

45. **Revision:** Appendix A-BM: Strike “all” and insert “storm” in two places under the turbidity heading of within the table.
Justification: The revision from “storm” to “all” flows was disapproved by EPA in 2008 and upheld after some discussion in the 2016 Technical Support Document. As a result, the language must revert to original.

EPA Comment/Recommendation: As noted in the response to 2.503 above, the EPA supports this revision.

46. **Revision:** Appendix A-ARV: Strike “all” and insert “storm” under the turbidity heading of within the table.
Justification: The revision from “storm” to “all” flows was disapproved by EPA in 2008 and upheld after some discussion in the 2016 Technical Support Document. As a result, the language must revert to original.

EPA Comment/Recommendation: As noted in the response to Reg. 2.503 above, the EPA supports this revision.

47. **Appendix A-ARV:**

EPA Comment/Recommendation: Please strike the “†” footnote indicator from the Poteau River and Unnamed Tributary entries in the Site-specific Criteria Variations Supported by Use Attainability Analysis table. The associated footnote can be removed as well since all listed criteria have been approved by the EPA.

48. **Revision:** Appendix A-OM: Strike “all” and insert “storm” under the turbidity heading of within the table.
Justification: The revision from “storm” to “all” flows was disapproved by EPA in 2008 and upheld after some discussion in the 2016 Technical Support Document. As a result, the language must revert to original.

EPA Comment/Recommendation: As noted in the response to Reg. 2.503 above, the EPA supports this revision.

49. **Revision:** Appendix A-OM: Insert “*These temporary standards variations are effective for 160 months from EPA’s approval of the EIP.” as a footnote below the Temporary Variations Supported by EIP table.
Justification: This footnote clarifies the timeframe the referenced entries have a temporary variation.

EPA Comment/Recommendation: As stated in the EPA’s January 7, 2020 approval letter and as stated in the accompanying Technical Support Document, the temporary site-specific criteria are approved for a period of 12.3 years from the date of the EPA’s approval. This is consistent with the timeline confirmed by ADEQ in Sarah Clem’s letter November

30, 2018 letter responding to the Russell Nelson's October 18, 2018 inquiry regarding the duration of the HESI EIP project. The 12.3-year duration equates to 148 months.

50. **Appendix A-OM:**

EPA Comment/Recommendation: The footnote "Not applicable for clean water act purposes until approved by EPA" and all references to it in the Temporary Variations Supported by EIP table have been removed. The EPA supports this revision. In addition, we recommend that the temporary minerals criteria be reflected in Rule 2.511(A) as well.

51. **Revision:** Appendix A-GC: Strike "Unnamed tributary to Flat Creek from EDCC Outfall 001 d/s to confluence with unnamed tributary A to Flat Creek Chloride 23 mg/L, Sulfate 125 mg/L, TDS 475 mg/L, (GC-2, #37) †" and "Unnamed tributary A to Flat Creek from mouth of EDCC 001 ditch to confluence with Flat Creek, Chloride 16 mg/L, Sulfate 80 mg/L, TDS 315 mg/L, (GC-2, #38) †"
Justification: EPA disapproved these site-specific criteria revisions as per August 31, 2001 TSD.

EPA Comment/Recommendation: As described in ADEQ's justification, the EPA has disapproved these revisions related to EDCC. No comment is necessary.

52. **Revision:** Appendix A-GC: Strike the "†" after the entry "Red River from mouth of the Little River to the Arkansas/Louisiana state line, TDS 780 mg/L (GC-1, #55, 58)†"
Justification: In a March 6, 2018 Technical Support Document, EPA approved the site-specific criteria change on the Red River. As a result, this criterion is approved for Clean Water Act purposes and no longer necessitates the "†" notation.

EPA Comment/Recommendation: As described in ADEQ's justification, the EPA has approved these revisions. No further comment is necessary.

53. **Revision:** Appendix A-GC: Strike "†" footnote indicator at the end of the "Little River from Millwood Lake to the Red River..." entry.
Justification: EPA approved these site-specific criteria revisions per a May 16, 2016 TSD. As a result, these criteria are approved for Clean Water Act purposes and no longer necessitate the "†" notation.

EPA Comment/Recommendation: As described in ADEQ's justification, the EPA approved these revisions in its 2016 action and deletion of the footnote indicate is appropriate. No further comment is necessary.

54. **Revision:** Appendix A-GC: Insert "*These temporary standards variations are effective for 160 months from EPA's approval of the EIP." as a footnote below the Temporary Variations Supported by EIP table.
Justification: This footnote clarifies the timeframe the referenced entries have a temporary variation.

EPA Comment/Recommendation: The EPA’s approval letter and supporting TSD state that these temporary standards are approved for 12.3 years from the time of approval (January 7, 2020)), consistent with the timeframe referenced in a letter to Russell Nelson, EPA Region 6, from Sarah Clem, ADEQ, dated November 30, 2018. This equates to 148 months.

55. **EPA Comment on Appendix A-GC:** We recommend that temporary minerals criteria be reflected in Rule 2.511(A) as well.

56. **Revision:** Appendix A-GC: Strike “Variations Supported by Technical Adjustment Red River from the Arkansas/Oklahoma state line to the mouth of the Little River, sulfate 250 mg/L, TDS 940 mg/L (GC-1, #57)†
Red River from mouth of the Little River to the Arkansas/Louisiana state line, sulfate 225 mg/L (GC-1, #58)†”

Justification: In a June 6, 2016 Technical Support Document, EPA disapproved the site-specific criteria change on the Red River.

EPA Comment/Recommendation: As described in ADEQ’s justification, in its June 6, 2016 action, the EPA disapproved revisions for the upper Red River – Arkansas/Oklahoma state line to the mouth of the Little River. No further comment is necessary.

57. **Revision:** Appendix A-GC: Revise Plate GC-1 to remove #57 and #58

Justification: In a June 6, 2016 Technical Support Document, EPA disapproved the site-specific criteria change on the Red River.

EPA Comment/Recommendation: See prior comment. No further comment is necessary.

58. **Revision:** Appendix A-GC: Revise Plate GC-2 to remove duplicate #40 and add #41

Justification: According to text, #41 corresponds to Loutre Creek from Highway 15 S. to the confluence of Bayou de Loutre which has no domestic water supply use.

EPA Comment/Recommendation: See prior comment. No further comment is necessary.

59. **Appendix A-GC: Coffee Creek and Mossy Lake**

EPA Comment/Recommendation: The EPA and the ADEQ have discussed concerns related to removal of Gulf Coastal designated uses for Coffee Creek and Mossy Lake that was approved by the EPA in the early 1980s as it relates to the requirements in the federal regulation at 40 CFR 131.10 and 131.20(a). Given the regulatory requirements, in an effort to determine the appropriate uses for Coffee Creek and Mossy Lake, the EPA funded a use attainability analysis (UAA) in 2007 that was developed by Parsons Engineering and the University of Arkansas Ecological Engineering Group to determine if the “no aquatic life use” designation for Coffee Creek and Mossy Lake is appropriate. The Parsons UAA indicates Coffee Creek and Mossy Lake have the potential to support

the state's Gulf Coastal aquatic life use but that the Georgia-Pacific Crossett discharge effects both habitat and aquatic life in Coffee Creek and Mossy Lake. A subsequent UAA developed by AquAeTer Environmental Engineering in 2013 on behalf of Georgia-Pacific did not refute these findings but recommended the development of a seasonal Gulf Coastal aquatic life use.

The ADEQ appears to have considered the AquAeTer UAA recommendations and likely its own analysis and proposed a seasonal Gulf Coastal ecoregion aquatic life use for portions of Coffee Creek as part of its 2019 triennial revisions as required by 40 CFR 131.10 and 131.20(a). However, the ADEQ's initial proposed revisions were limited to the addition of a "...seasonal Gulf Coastal ecoregion aquatic life use, but its application was limited to the historic channel of Coffee Creek upstream of Georgia Pacific's Mossy Lake Treatment Unit from N33.057, W092.055 to N33.094, W092.04 and the remaining upstream portion of the historic channel from N33.112, W092.013 to N33.119, W091.995." In our October 31, 2019 letter, the EPA provided comments and recommendations regarding this proposed revision, noting that it did not include seasonal uses that would apply to the entirety of Coffee Creek and Mossy Lake or appropriate CWA Sec. 101(a)(2) uses that would apply to these waters during the remainder of the year. These initial comments also referred to the requirements found in the federal regulations.

As part of Arkansas's water quality standards revisions process, the ADEQ has since provided its proposed revisions to Reg. 2, now Rule 2, to the Governor's Office for review. Following that review, the ADEQ petitioned the Arkansas Pollution Control and Ecology Commission (Commission) to adopt the revisions proposed by the Water Quality Planning Branch. However, the proposed revisions to Rule 2 that were brought before the Commission during its July 29, 2020 hearing no longer included the previously proposed seasonal use for the portions of Coffee Creek referred to in the ADEQ's initial proposed revisions and did not include uses consistent with CWA Sec. 101(a)(2) or Rule 2.102 and 2.302 for the Coffee Creek or Mossy Lake. In response, the EPA again recommends that Commission adopt uses consistent with CWA Sec. 101(a)(2) and Arkansas's own Rule 2.102 for the entirety of Coffee Creek and Mossy Lake and again reiterates the CWA requirements and those in the federal regulations at 40 CFR 131.10 and 40 CFR 131.20(a). See the EPA's October 2019 comments in **Attachment 4**.

60. **Revision:** Appendix A-D: Insert "(Rocky Branch to Pulaski/Lonoke county line)" and strike "from Rocky Branch Creek to Bayou Two Prairie" in the first Bayou Meto entry under "Site-specific Criteria Variations Supported by Use Attainability Analysis" heading.

Justification:

- A 2007 3rd party rulemaking (minute order 04-41) states "modify the dissolved mineral standards for Bayou Meto from the point it crosses the Pulaski/Lonoke County line to the confluence with the Arkansas River as follows: sulfates from 37 mg/l to 45 mg/l and chlorides from 64 mg/l to 95 mg/l."
- The October 26, 2007, 2007 version of Reg. 2 submitted to EPA for approval states "Bayou Meto (mouth to Bayou Two Prairie)".

- EPA noted in an August 5, 2008 TSD that the reach description in the minute order and in Reg. 2 did not match. EPA's August 5, 2008 TSD stated approval for "Bayou Meto (mouth to Bayou Two Prairie)."
- The 2013 triennial review attempted to clarify the original 3rd party rulemaking's intended reach and revised the regulation to state "Bayou Meto (mouth to Pulaski/Lonoke county line)."
- EPA's October 31, 2016 TSD made no statement of this revision (ie approve, disapprove, no action).
- Additionally, there are two sets of criteria noted in the reg for part of Bayou Meto. Therefore the 2016 clarification is once again being made in addition to clarification of the criteria applicable to the upper reach "Bayou Meto (Rocky Branch to Pulaski/Lonoke county line)."

EPA Comment/Recommendation: As noted in our prior response on Reg. 2.511(A), the proposed revisions here are specific to "Bayou Meto to Polaski/Lonoke county line" and "Bayou Meto (Pulaski/Lonoke county line)." The EPA does not have any concerns with revising these descriptors in Appendix D (D-3, Map Insert 42).

61. **Revision:** Appendix A-D: Bayou DeView from mouth to AR Hwy 14 moved to different part of Site Specific Standards Criteria Variations table.

EPA Comment/Recommendation: This water should be removed from its original location (D-1. # 41) of the same table.

ATTACHMENT 1

ANTIDEGRADATION IMPLEMENTATION

**EPA COMMENTS AND REGOMMENDATION ON
ARKANSAS'S DRAFT
ANTIDEGRADATION IMPLEMENTATION METHODS
2020 EDITION**

**Proposed by
Arkansas Energy and Environment
Division of Environmental Quality
Office of Water Quality**

**U.S. EPA REGION 6
WATER DIVISION**

August 2020

DEFINITIONS

Alternatives Analysis: A structured evaluation of the practicability of less- and non-degrading alternatives to an activity likely to cause lowering of water quality.

EPA comment: *In previous comments, the EPA noted that the requirement found in 40 CFR 131.12(a)(2)(ii) refers to an evaluation of a “...range of practicable alternatives...”, rather than evaluating whether an alternative is practicable. This is important because this analysis should be comparing the different options that have already been determined to be practicable and that lessen or prevent degradation. Thus, the EPA again recommends structuring the alternatives analysis definition to compare different practicable options that prevent or lessen degradation.*

Baseline Water Quality (BWQ): The level of water quality that is used to establish the assimilative capacity within a waterbody. BWQ will be determined the first time that an analysis of significant degradation is done for authorization of a proposed new or expanded discharge is considered for authorization after {STARTING DATE}. For a new authorization, the BWQ shall be representative of the water quality at or immediately upstream from a proposed discharge. For an expanding discharge, the BWQ shall include the levels of pollutants already permitted to be discharged at maximum design flow. Once established, BWQ is a fixed quantity expressed as a concentration.

EPA comment: *Recommend replacing “the first time that an analysis of significant degradation is done” with “the first time a new or expanded discharge is considered.” The current language is problematic because BWQ needs to be determined to track the use of assimilative capacity by nonsignificant degradation. “Nonsignificant” degradation needs to be tracked so that it is clear when over 10% of the assimilative capacity has been cumulatively utilized in the water body and a Tier 2 review is needed for the next activity. EPA also recommends replacing “For an expanding discharge” with “For an expanding authorization, that was last authorized prior to [month, year]” so that it is clear that this is only accounting for expansions of discharges that were approved prior to the establishment of these AIMS.*

Existing Activity: NPDES permits, state permits, any activity having a CWA § 401 certification, or any activity that threatens the most sensitive use or results in significant degradation, at the time the baseline water quality is determined.

EPA comment: *Please clarify how the state plans to determine if an activity results in significant degradation if the BWQ hasn’t been determined yet. Does the state only intend this reference to significant degradation to be defined in terms of baseline water quality, or defined more broadly? Is this phrase meant to be synonymous with the definition of “significant lowering of water quality”? If so, please clarify that in the definition for “significant lowering of water quality”, if not, please include a definition of “significant degradation”.*

Existing Use Protection (EUP): All parameters of all waters are designated for all uses as per Rule 2.302 unless the use has been removed following APC&EC Rule 2.306.

EPA comment: *This definition does not define what existing use protection is but rather refers to Rule 2.302 that describes designated uses that may apply to specific waters and Rule 2.306 that describes the procedures for removing those uses. The definition should be revised to include the following: Maintenance and protection of existing instream water uses and the level of water quality necessary to protect existing uses.*

High Quality Protection (HQP): For the uses listed in CWA 101(a)(2), all parameters of waters that are not defined as Tier 1 or 3 and have water quality that is better than water quality criteria.

EPA comment: *This revised definition does not appear to be functionally different than the prior definition of “High Quality Water (HQW).” This definition should be revised to clarify how the state intends to apply antidegradation protections to CWA Sec. 101(a)(2) uses. The EPA recommends that the ADEQ describe how protection for high quality waters includes a review process for using assimilative capacity. We also recommend including the following into this provision: Protection and maintenance of parameters that have water quality that exceeds levels necessary to support the protection and propagation of fish, shellfish, and wildlife and recreation in and on the water. Any significant lowering of water quality for these parameters requires the completion of a Tier 2 review prior to authorization.*

Parameter-by-Parameter Basis: The review of the pollutants in a waterbody by assessing the level of each pollutant of concern, as opposed to assessing the overall condition of a waterbody, for the purpose of determining the level of antidegradation review applicable to the waterbody.

EPA comment: *Strongly recommend that the ADEQ expand this definition to add: “When an activity is proposed, the state determines which parameters represent water quality that is better than the applicable criteria developed to protect the CWA section 101(a)(2) uses. The water body is then considered high quality for those parameters. Using this method, a water body can be tier 2 for some parameters and tier 1 for others. Determinations of protection are made at the time of the antidegradation review.”*

Water Quality Criteria (WQC): Chemical, physical, and biological elements of Water Quality Standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use.

Proposed EPA comment: *The EPA recommends replacing this definition with the definition of water quality criteria from federal regulation: “Criteria are elements of State water quality standards, expressed as constituent concentrations, levels, or narrative statements, representing a quality of water that supports a particular use. When criteria are met, water quality will generally protect the designated use.”*

Waterbody-by-Waterbody Approach: The review of the pollutants in a waterbody by assessing the overall or combined levels of the pollutant of concern as opposed to assessing the level of each pollutant of concern in a waterbody for the purpose of determining the level of protection applicable to the waterbody.

EPA comment: *This approach should/can consider more than just the pollutant concentrations. It should be a holistic assessment. The EPA recommends replacing the current definition with this: **Water body-by-Water body Approach:** An approach for determining whether a water body/waterbody segment is high quality based on a judgment of the overall quality of the water body considering a variety of factors. A judgment of quality is made on a weighted assessment of chemical, physical, biological, and other applicable information. Waters can be identified as high quality even if criteria for certain pollutants are not attained or if some designated uses are not fully supported. The presence of a water body on the CWA section 303(d) list for one CWA 101(a)(2) use does not automatically exclude it from potentially being identified as a Tier 2 water. The quality of the water body can either be determined before or at the time of the antidegradation review.*

Waters of the State: All streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state. A.C.A. § 8-4-102 (2017). ~~For the purposes of this Antidegradation Implementation Methodology, waters of the state include those waters meeting the federal definition of Waters of the United States (WOTUS) for Clean Water Act purposes.~~

EPA comment: *Strongly recommend that the reference the last sentence in this provision be deleted. Federal regulations at 40 CFR 131.12 do not limit the state's obligation to protecting only those waters defined as waters of the U.S. The Arkansas Code Annotated (A.C.A. § 8-4-102 et seq.)) states that "waters of the state" means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state." Given that Arkansas's Water Quality Act provides a more expansive definition of "waters of the state," although federal jurisdiction is limited to waters of the U.S., federal regulations do not prohibit the state from applying WQS to all waters of the state. As this provision is currently written, many waters of the state that may be critical to maintaining biological integrity and preserving water quality throughout the state would be excluded from protections in conflict with 40 CFR 131.12 and the provisions in Rule 2.102, and 2.501 referring to applicability to all waters at all times.*

INTRODUCTION

No comments are necessary for this section.

TIER PROTECTION LEVELS

An Antidegradation Policy provides a means for maintaining and protecting surface water quality by requiring all activities with the potential to affect water quality to undergo review and 153 a comment period prior to any decision to approve or deny the activity. In compliance with 40 CFR § 131.12, implementation procedures for Arkansas's Policy identify levels of antidegradation protection (tiers), determination of baseline water quality (BWQ), assessing and determining extent of acceptable lowering of water quality in a high quality water, and identification of less-degrading or non-degrading alternatives. A waterbody's tier identification may be completed using a parameter-by-parameter or waterbody-by-waterbody approach. Arkansas is implementing a hybrid approach in that Tier 1 and Tier 2 protection will be identified on a parameter-by-parameter basis and Tier 3 protection will be identified on a waterbody-by-waterbody basis (Figure 1).

Tier 1: Existing Use Protection (EUP) the basic protection afforded to all parameters of all waterbodies regardless of current water quality, which is that existing uses will be maintained and protected. ~~EUP applies to those waters meeting the definition of WOTUS as defined for purposes of the federal Clean Water Act.~~

EPA comment: *The effect of the revised Existing Use Protection (EUP) provision appears to limit minimum existing use (Tier 1) protection to only waters of the U.S. as they are defined under current federal regulations. As noted in previous comments, by specifying that existing use protections only apply to waters of the U.S. this provision excludes protections to all other waters of the state. Arkansas Code Annotated (A.C.A. § 8–4–102 et seq.) states that "waters of the state" means all streams, lakes, marshes, ponds, watercourses, waterways, wells, springs, irrigation systems, drainage systems, and all other bodies or accumulations of water, surface and underground, natural or artificial, public or private, which are contained within, flow through, or border upon this state or any portion of the state.. Federal regulations at 40 CFR 131.12 do not limit the state's obligation to protecting only those waters defined as waters of the U.S., and given that the state's Water Quality Act provides a more expansive definition of "waters of the state," EPA recommends deleting the second sentence limiting application of Tier 1 protections to only waters of the U.S., to the exclusion of other waters of the state.*

Tier 2: High Quality Protection (HQP) applies to WOTUS for protection of baseline water quality which is better than the water quality criteria. An activity that proposes significant lowering of water quality would require a demonstration that the lowering of water quality is necessary and Tier 1 protection is ensured. Tier 2 is the default protection for all parameters of all waters, with the exception those parameters or waters that have already been determined to be Tier 1 or Tier 3.

EPA comment: *An activity that proposes significant lowering of water quality would require more than a demonstration that the lowering of water quality is necessary, and that Tier 1 protection is ensured. There are additional steps, including a socio-economic demonstration, assurances of proper pollution control measures, and stakeholder participation. EPA*

recommends revising this definition, as indicated in the track changes above, to clarify that the steps for the demonstration are detailed later in this document.

As noted in our comment on EUP, the intent of the revisions to the High-Quality Protection provision appears to be to limit Tier 2 protection to only waters of the U.S. as defined under current federal regulation. As noted in those comments, by specifying protections for Tier 2/high-quality waters defined as waters of the U.S., this provision excludes protections to all other waters of the state (See ACA §8–4–102 et seq.). Although federal jurisdiction is limited to waters of the U.S., federal regulations do not prohibit the state from applying WQS to all waters of the state. As currently written, many waters of the state, such as wetlands and others that may be critical to maintaining biological integrity and preserving water quality throughout the state would be excluded from protections in conflict with the provisions in Rule 2.102, and 2.501 referring to applicability to all waters at all times. At a minimum, the EPA recommends replacing the reference in the first sentence limiting application of Tier 2 protections to only waters of the U.S., with the phrase “waters of the state.”

Tier 3: Outstanding Resource Waters (ORW) applies to waterbodies listed as an Outstanding Resource Water (ERW, ESW, and NSW) in APC&EC Rule 2. Tier 3 review is required for those waters encompassed by APC&EC Rule 2.203 and 40 CFR § 131.12(a)(3).

TIER PROTECTION LEVELS AND ANTIDegradation EVALUATION

A) Tier 1- Existing Use Protection (EUP) Evaluation

~~Review of Tier 1 review of waters of the state (ACA §8–4–102 et seq.) will be for performed for all parameters of those parameters all WOTUS of WOTUS that are not attaining water quality criteria, including those in . It will also include certain canals/ditches, storm water control structures, and structures purposefully created for effluent conveyance with an existing use attained on or after November 28, 1975, whether or not they are included in the water quality standards. For Tier 1 protection waters, the Antidegradation Policy is implemented through the state’s NPDES Permit Issuance Process, including applicable major modifications (See Section 5). New or expanding activities are not allowed to discharge pollutants that may cause or contribute to impairment of a designated or existing use, violation of water quality criteria, or increase pollutant loading to a § 303(d) listed water.~~

Tier 1 review allows activities to occur according to applicable water quality standards without social and economic analyses. Other statutory, regulatory, or policy (CPP) requirements for the development of appropriate effluent limits and other permit requirements are still applicable.

EPA comment: *Per our prior comments, the intent of the revised Existing Use Protection provision here appears to limit minimum existing use (Tier 1) protection to only waters of the U.S. as defined in current federal regulation. By specifying that existing use protections only apply to waters of the U.S., this provision excludes protections to all other waters of the state*

(See ACA §8–4–101 et seq.). The EPA recommends that the ADEQ specify that the review of Tier 1 waters and reference the definition of waters of the state.

The EPA also recommends the revisions included in track changes above, including deleting the phrase “that are not attaining water quality criteria.” Tier 1 review is performed for all parameters, since it is a part of the Tier 2 review as well. For all WOTUS the state needs to assure that existing uses are protected.

B) Tier 2- High Quality Protection (HQP) Evaluation

~~Review of A~~ Tier 2 review waters will be performed for all parameters that are attaining water quality criteria in all waters of the state other WOTUS. By definition, at the high quality waters protection level, where the baseline water quality (BWQ) is better than the minimum water quality criteria for one or more water quality parameters. In an evaluation of Tier 2 waters attain water quality criteria for a pollutant of concern. A where a significant increase (> 10% of total assimilative capacity) in cumulative pollutant loading is being evaluated, which includes all existing discharges and activities, are shall required to be considered as part of a demonstration that the lowering of water quality is necessary justified to accommodate important economic or social development in the area in which the waters are located. The demonstration shall include the following items:

EPA comment: As noted in our comments on the revised Existing Use Protection provision, this provision also appears to limit (Tier 2) protection to only waters of the U.S. as defined under current guidance. Again, we recommend that this provision specify that Tier 2 protections extend to all other waters of the state (See ACA §8–4–102 et seq.). As noted previously, this provision would allow many waters of the state, such as wetlands and others that may be critical to maintaining biological integrity and preserving water quality throughout the state to be excluded from protections in conflict with the provisions in Rule 2.102, and 2.501 referring to applicability to all waters at all times.

The EPA recommends a number of revisions to the proposed language, included in track changes above. Those recommended changes include deleting the phrase “which includes all existing discharges and activities.” It is unclear whether this refers to the baseline water quality or to the cumulative pollutant loading. EPA recommends deleting this phrase to avoid confusion as “cumulative pollutant loading” captures the idea of a cumulative cap and the requirements for determining BWQ are specified elsewhere. If the ADEQ would like to retain this phrase, it would require clarifying whether this phrasing is referring to the concept of baseline water quality or cumulative pollutant loading.

The EPA also recommends replacing the term “justified” with the term “necessary” because it implies the need to complete an alternatives analysis and also indicates that there are no other practicable options to the lowering of water quality, consistent with 40 CFR 131.12. The use of the word “justifies” does not imply the necessity to lower water quality, and therefore the use of this term here could potentially be interpreted to be inconsistent with 40 CFR 131.12. In addition,

40 CFR 131.12(b) states, “The State shall develop methods for implementing the antidegradation policy that are, at a minimum, consistent with the State’s policy and with paragraph (a) of this section”. The state’s antidegradation policy includes the following language: “that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located”. EPA recommends using this language to ensure consistency with the state’s policy as required by 40 CFR 131.12(b).

- 1) Lowering water quality is necessary~~justifiable~~ to accommodate important economic or social development in the area where the water is located;
- 2) The highest statutory and regulatory requirements for all new and existing point sources are achieved;
- 3) All cost-effective and reasonable best management practices (BMPs) for nonpoint source control are considered. See Section 9 for additional discussion; and
- 4) Tier 1 protection is ensured.

EPA comment: *Reiterates the prior recommendation that in 1), the word “necessary” be used because it implies the need to complete an alternatives analysis and also indicates that there are no other practicable options to the lowering of water quality, consistent with 40 CFR 131.12. The use of the word “justifies” does not imply the necessity to lower water quality, and therefore the use of this term here could potentially be interpreted to be inconsistent with 40 CFR 131.12. In addition, 40 CFR 131.12(b) states, “The State shall develop methods for implementing the antidegradation policy that are, at a minimum, consistent with the State’s policy and with paragraph (a) of this section”. The state’s antidegradation policy includes the following language: “that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located”. EPA recommends using this language to ensure consistency with the state’s policy as required by 40 CFR 131.12(b). In addition, for 2), EPA recommends including a section that describes how this will be done in Section 8 or creating its own section right after section 8, since this is part of the Tier 2 review.*

Decisions regarding significant lowering of water quality of Tier 2 protection levels will only be made after steps 1-4 are completed and after the intergovernmental coordination and public participation provisions have been satisfied.

EPA comment: *Recommend that language referencing public participation provisions specifically reference either 40 CFR 25 or Arkansas’s Continuing Planning Process document (2000) which itself references Part 25.*

B) Tier 3 Outstanding Resource Waters (ORW) Evaluation

ORWs are in APC&EC Rule No. 2 for their outstanding natural or cultural resource value. ORW waters are designated as ERW, ESW, or NSW (APC&EC 2015, Appendix A, D). An ORW is Tier 3, regardless of baseline water quality for each parameter. A Tier 3 waterbody’s assimilative capacity is to be maintained in order to protect their outstanding natural or cultural value existing uses. Proposed new or expanding activities may proceed, but with no net increase of parameter load. Activities that result in temporary lowering of water quality are eligible for review.

ORWs are in APC&EC Rule 2 for their outstanding natural or cultural resource value. ORW waters are designated as ERW, ESW, or NSW (APC&EC 2015, Appendix A, D). An ORW is Tier 3, regardless of baseline water quality for each parameter. A Tier 3 waterbody's assimilative capacity is to be maintained in order to protect existing uses including recreational or ecological significance. ~~Proposed new or expanding Activities that result in temporary and short-term lowering of water quality with a duration no longer than XX and must be~~ are eligible for reviewed prior to state action.

EPA comment: *The premise that an ORW is a Tier 3 water may be based on exceptional recreational and ecological significance is consistent with 40 CFR 131.12(a)(3). However, the federal regulation also requires that "water quality shall be maintained." Thus, new or expanded discharges to ORW/Tier 3 waters are prohibited except as described in the preamble to the regulation, which allows that "States may allow some limited activities which result in temporary and short-term changes in water quality." The only exception to this prohibition as discussed in the preamble to the standards regulation (48 F.R. 51402), allows some limited activities that result in temporary and short-term changes in the water quality of ONRW. Such activities must not permanently degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ONRW. The EPA has acknowledged that it is difficult to give an exact definition of "temporary" and "short-term" because of the variety of activities that might be considered. However, in broad terms, the EPA's view of temporary is weeks and months, not years.*

The provision here indicates that permanent new or expanding discharges are allowable, with the limitation that there be no net increase of load for any parameter. The scenario that a new/expanded discharge will not affect assimilative capacity and thus would be allowable in a Tier 3 water is unlikely and moreover, not "temporary" and "short-term." Further, Tier 3 designation also offers special protection for waters that are important for recreation, unique, or sensitive ecologically, but whose water quality, as measured by the traditional parameters may not be particularly high or whose characteristics cannot be adequately described by these parameters (such as wetlands). The EPA recommends that this provision be revised to make it clear that the intent is to limit water quality degradation to the shortest possible time. Although the last sentence indicates that temporary discharges are eligible for review, the provision should make it clear that such activities should not impact existing uses or alter the essential character or special use that lead to the adoption of the ORW/Tier 3 designated use.

ASSIGNING TIER PROTECTION

C) Tier 1 Protection

D) Tier 2 Protection

Tier 2 protection is assigned on a parameter-by-parameter basis. A Tier 2 review applies to all proposed discharges to ~~WOTUS~~ waters of the State, unless one of the following conditions applies:

- The water is an ORW to which Tier 3 protection applies,
- The discharge is considered insignificant in accordance with the criteria explained in Section 8.B.4 of this document, or

- The receiving water is listed as impaired for a POC on the Arkansas 303(d) List, which requires a Tier 1 review for that POC.

EPA comment: *As noted in previous comments regarding the revised Existing Use Protection provision, this provision also appears to limit (Tier 2) protection to only waters of the U.S. as defined under current regulation. Again, we recommend that this provision specify that Tier 2 protections extend to all waters of the state (See ACA §8–4–102 et seq.). Although federal jurisdiction is limited to waters of the U.S., as noted previously, this provision would allow many waters of the state, such as wetlands and others that may be critical to maintaining biological integrity and preserving water quality throughout the state to be excluded from protections in conflict with the provisions in Rule 2.102, and 2.501 referring to the purpose and applicability water quality standards to all waters at all times.*

E) Tier 3 Protection

Tier 3 protection is assigned on a waterbody-by-waterbody basis to all waters designated as ORWs in APC&EC Rule No. 2. Any degradation of water quality is prohibited in these waters unless the discharge only results in temporary and short-term degradation of water quality with a duration of no longer than {insert duration} and must be reviewed prior to state action.

EPA comment: *Under federal regulation, any water can be assigned ONRW status regardless of water quality, since factors such as ecological or recreational significance are characteristics that the state may wish to protect. EPA recommends the edits above to define the limits of temporary and short-term degradation that may be allowed by the state.*

REVISING TIER PROTECTION LEVELS

The tier protection for a water may change if it is added to or removed from the list of ORWs in APC&EC Rule No. 2. The tier of protection for a pollutant may change if an impairment for that pollutant is added to or removed from the Arkansas 303(d) List.

EPA comment: *Strongly recommend removing or revising this provision because it appears to allow the level of protection afforded to ORWs/Tier 3 waters to be changed based on an impairment from a pollutant. This appears to be inconsistent with Rule 2.106 which defines designated use as specified in in the water quality standards whether or not that use is being attained, and inconsistent with Rule 2.203 which specifies that the “water quality for which the outstanding waterbody was designated shall be protected.” Further, Rule 2.302 specifies that the ORW designated use is a designated use, not simply a descriptive designation. Given this, there is a reasonable expectation that waters that the Commission adopt the ORW designated use based on exceptional water quality, important recreational, unique or sensitive ecological characteristics of those waters and represent an existing use that cannot be removed per 40 CFR 131.10(h)(1).*

The preamble to the water quality standards regulation (48 F.R. 51402) allows some limited activities that result in temporary and short-term changes in the water quality of an ORW/Tier 3

water. However, these activities must not permanently degrade water quality or result in water quality lower than that necessary to protect the existing uses in the ORW/ONRW. As noted previously, there are a variety of activities that may result in a temporary or short term lowering of water quality that may occur over a period of weeks and months but not years. The intent of 40 CFR 131.12(a)(3) is to ensure that waters like Arkansas's ORWs are provided the highest level of protection by prohibiting the lowering of water quality. Tier 3 waters that may not have high water quality as measured by the traditional parameters but are also afforded special protection where characteristics that cannot be adequately described by water quality parameters exist, including important recreational or ecological significance.

ACTIVITIES ELIGIBLE FOR ANTIDEGRADATION REVIEW

General Permits: In an effort to expedite permit timeliness, antidegradation requirements will be incrementally addressed for all general permits during the renewal process within 5 years of approval of this antidegradation implementation procedure. However, activities covered by general permits may still be subject to an antidegradation review if during the application (Notice of Intent) period the activity is determined to likely cause significant degradation.

EPA comment: *Related to prior comments, the term "significant degradation" is not defined, thus, it is unclear what constitutes significant degradation or how it will be determined, or if the phrase is related to or synonymous with the definition of "significant lowering of water quality."*

General Antidegradation Reviews: the Division may develop a general antidegradation review for small domestic dischargers (generally less than or equal to 50,000 gallons per day) into Tier 2 waters.

EPA comment: *This language appears to refer to a categorical alternative analysis. Although such a categorical alternative analysis may be possible, a "general antidegradation analysis" cannot be done as each receiving water may have very different characteristics. EPA recommends that ADEQ either remove this provision or discuss further with EPA. EPA would like to discuss this further with the state to better understand what is being proposed, as it appears to be a novel idea that no other state has previously implemented.*

ANTIDEGRADATION REVIEW PROCEDURE

B) Basis of Antidegradation Review Procedure

This portion of the chapter outlines the procedure for determining whether or not degradation is justified in WOTUS from regulated discharges/activities. The antidegradation review procedure is based on the following items. See Section 15 below for the Antidegradation Decision Diagram.

EPA comment: *As noted in prior comments, this provision is limited to procedures for determining if degradation is justified in waters of the U.S. and excludes all other waters of the*

state (See ACA §8–4–102 et seq.). Although federal jurisdiction is limited to waters of the U.S., federal regulations at 40 CFR 131.12(a)(2)(i) states that the waters cannot be excluded from the protections as described in paragraph (a)(2). As noted previously, this provision would allow many waters of the state, such as wetlands and others that may be critical to maintaining biological integrity and preserving water quality throughout the state to be excluded from protections in conflict with the provisions in Rule 2.102, and 2.501 referring to purpose and applicability to all waters at all times.

The EPA recommends replacing the word “justified” with “necessary.” The two terms are not interchangeable, as comments on section 4(B) explained above. 40 CFR 131.12(b) states, “The State shall develop methods for implementing the antidegradation policy that are, at a minimum, consistent with the State’s policy and with paragraph (a) of this section”. The state’s antidegradation policy includes the following language: “that allowing lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located”. EPA recommends using the word necessary in this provision to ensure consistency with the state’s policy and 40 CFR 131.12(a) as required by 40 CFR 131.12(b).

3) Assimilative Capacity

Assimilative Capacity is defined in Section 1. The assimilative capacity of a waterbody describes the amount of a pollutant that can be added to that waterbody without causing a violation of water quality criteria or impairing a beneficial use. Tier 1 protection is to maintain existing uses and water quality standards, which assumes no assimilative capacity. Tier 3 protection requires that the assimilative capacity is to be maintained in order to maintain protect existing uses water quality. For Tier 2 protection, the assimilative capacity is protected by evaluating and setting permit limits at critical stream conditions, at discharge design flow conditions, in consideration of background water quality conditions, and in accordance with procedures established in Rule 2 and the CPP. Occasionally, multiple activities exist in close proximity, and the potential pollutant loads for all activities shall be evaluated together.

EPA comment: Recommend replacing the third sentence in the preceding paragraph with the following clarification: “For parameters within a water body that have been assigned Tier 1 protection, no assimilative capacity is available and existing uses and water quality standards will be maintained and protected.” This revision helps to clarify that the protection is being assigned on a parameter-by-parameter basis.

The EPA also recommends the tracked edits above to revise the phrase “protect existing uses” to “maintain existing water quality.” This edit would clarify that tier 3 protects more than existing uses. It protects existing levels of water quality.

In order to determine the remaining assimilative capacity of a waterbody for a significant degradation analysis, the ~~total~~ assimilative capacity must be determined for each water quality parameter each time a new or expanded facility/activity is

considered. The ~~total~~ assimilative capacity for dissolved oxygen is indirectly evaluated through water quality modeling of oxygen-demanding pollutants. Each waterbody has a unique available capacity for each water quality parameter that is derived from Baseline Water Quality (BWQ). BWQ must take into consideration all pollutant contributions from natural sources, permitted point sources (100% of allocation), and nonpoint sources at its time of determination. The ~~total~~ available assimilative capacity is the difference between the water quality criteria and the baseline water quality.

Example of a conservative constituent:

water quality criteria - baseline water quality = total assimilative capacity
10 mg/L - 3 mg/L = 7 mg/L

10 mg/L= water quality criteria;

3 mg/L= baseline water quality[*includes contribution from natural, permitted point sources, and nonpoint sources*];

7 mg/L= ~~total~~ assimilative capacity [~~*includes contribution from natural, permitted point sources, and nonpoint sources*~~].

EPA comment: *The EPA recommends the edits that are reflected in track changes above. EPA recommends deleting the word “total” before assimilative capacity to be consistent with the revision to the title of this section and the removal of the term “total assimilative capacity” from this document. The EPA recommends adding back in the phrase “at its time of determination” in the excerpt above because BWQ is established at a set point in time, and the 10% of assimilative capacity used will be determined from that point forward. EPA also recommends moving the phrase “includes contribution from natural, permitted point sources, and nonpoint sources” from assimilative capacity to BWQ as this seems to be how the state plans to define BWQ based on the sentence, “BWQ must take into consideration all pollutant contributions from natural sources, permitted point sources (100% of allocation), and nonpoint sources.”*

4) Degradation Determination

Documentation

Documentation to support a significant or non-significant lowering of water quality determination may include, but not be limited to, the percent change of the pollutant concentration, loading calculations, or percent reduction of assimilative capacity. For bioaccumulative parameters and other parameters that may impact aquatic biota, a Tier 2 review may still be required even if the discharge is determined to be non-significant. If significant degradation is predicted then this shall be a documented selection of the applicant.

EPA comment: *Given the language, it is unclear if this is suggesting that some type of mass-balance model will be used to determine whether the degradation will be significant or if this is referring to a situation where a discharger could decide to assume degradation is significant and proceed with a Tier 2 review.*

Consumption of *less than* or equal to 10% of the assimilative capacity

The applicant may demonstrate the discharge consumes less than 10% of the assimilative capacity through the use of existing water quality data. Unless there is a potential for bioaccumulation or impacts to aquatic biota, no alternatives analysis or socioeconomic impact review is required. This analysis must be done on a cumulative basis and must incorporate all degradation from all activities that have occurred in this water body since the determination of the BWQ. In the cases where there is potential for bioaccumulation or impacts to aquatic biota may be present, an antidegradation review may be required.

EPA Comment: *Per the EPA's previous comment on this provision, we recommend adding the text "This analysis must be done on a cumulative basis and must incorporate all degradation from all activities that have occurred in this water body since the determination of the BWQ. In the cases where there is potential for bioaccumulation or impacts to aquatic biota may be present, an antidegradation review may be required." Judicial decisions have indicated that the use of a de minimis provision is only acceptable when the use of assimilative capacity is considered on a cumulative basis.*

Consumption of *greater than* 10% of the assimilative capacity

A permit applicant may proceed without calculation of total assimilative capacity if it is predicted that significant degradation will occur. The applicant may proceed with submitting an alternatives analysis and social-economic impact analysis (Section 8.B.5). Once 10% of the assimilative capacity determined at the time that the BWQ was established has been utilized, all subsequent activities that result in a new or increased discharge must undergo a Tier 2 review.

EPA comment: *Recommend adding the tracked text above to clearly indicate that there is a cumulative cap for the de minimis provision.*

Consumption of Dissolved Oxygen Sag

Consumption of the total assimilative capacity for oxygen-demanding pollutants is calculated based on the dissolved oxygen sag in a steady state water quality model.

EPA comment: *Please specify what water quality model is referred to here.*

a) Alternatives Analysis

An applicant proposing any new or expanded discharge or activity that would significantly lower water quality is required to prepare an evaluation of alternatives. The purpose of this evaluation is to determine practicable alternative(s) that would prevent or limit the degradation associated with the proposed activity. Alternatives are compared to practicability, available technology, and affordability to the controls required for protecting ~~beneficial~~^{existing} uses and achieving highest statutory and regulatory requirements. Alternatives to be considered should include but are not limited to:

EPA comment: Recommend revising the paragraph above as tracked, changing existing uses to beneficial uses to indicate the protection of both designated and existing uses.

- i) Product or raw material substitution;
- ii) Improved operation and maintenance of existing treatment;
- iii) Installation of biological/physical/chemical treatment process that provide higher level of treatment;
- iv) Water conservation measures; and
- v) Other alternatives.

If experimental or unproven methods are proposed, DEQ may request information on previous applications of the method, effectiveness, transferability (if applicable), costs and other information as appropriate. Applications containing proposals for new or experimental methods will be required to append information regarding likely performance results. Such applications may be approved at Director's discretion with the condition that if the proposed technology does not meet project pollutant control targets, the applicant must adopt conventional or other pollution control measures that meet state antidegradation requirements. DEQ may require that the applicant analyze additional alternatives if an appropriate range of alternatives were not evaluated. DEQ staff and the applicant should meet to discuss these and other issues early in the process. The applicant should also document any alternatives that were determined to be impracticable and provide a basis for the conclusion. If practicable alternatives are identified, the lowering of water quality in a high-quality water will only be authorized if one of those alternatives is selected for implementation.

EPA Comment: Recommend the inclusion of the tracked sentence above to ensure consistency of the AIMS with 40 CFR 131.12(a)(ii), as required by 40 CFR 131.12(b), which states: "(b) The State shall develop methods for implementing the antidegradation policy that are, at a minimum, consistent with the State's policy and with paragraph (a) of this section."

40 CFR 131.12(a)(ii) states: (ii) Before allowing any lowering of high water quality, pursuant to paragraph (a)(2) of this section, the State shall find, after an analysis of alternatives, that such a lowering is necessary to accommodate important economic or social development in the area in which the waters are located. The analysis of alternatives shall evaluate a range of practicable alternatives that would prevent or lessen the degradation associated with the proposed activity. When the analysis of alternatives identifies one or more practicable alternatives, the State shall only find that a lowering is necessary if one such alternative is selected for implementation.

b) Social Development Analysis

Social-economic, environmental, or public health issues may be considered when lowering water quality. This analysis is not necessary if a non-degrading or non-significant degrading alternative is chosen. Factors to be considered by the applicant in making a determination include but may not be limited to:

- i) Employment (e.g. increasing production and jobs, maintaining, or avoiding reduction in employment, permanent or short-term);
- ii) Improved community tax base;
- iii) Abatement of an environmental or public health problem;
- iv) Providing a social benefit to the community;
- v) Increasing or improving housing; and
- vi) Providing necessary public services (e.g., fire department, school, infrastructure).

EPA comment: *Recommend that ADEQ provide additional detail to specify who is responsible for conducting the social development analysis and, at what point in the review process it will be conducted.*

c) Economic Analysis

Alternatives that are deemed practicable must undergo a present worth cost comparison. An analysis of pollution control costs, or economic efficiency, is appropriate when the applicant desires to optimize the balance between water quality benefits and project costs. General cost categories that should be considered include capital cost, annual operating and maintenance cost, customer costs, and debt service.

In order to develop a standardized framework for projecting, evaluating, and comparing costs associated with various pollution control alternatives, applicants should use a 20-year life cycle present worth framework for reporting cost information. However, applicants may propose alternate economic demonstrations if appropriate. Alternative direct cost comparisons may be presented if the present worth calculation is complicated by the amount of difference in the effective design longevity of the alternatives examined.

The Division has developed a worksheet for guidance in calculating costs. The worksheet or an alternative cost analysis should be completed and submitted with the antidegradation review.
{ADD REFERENCE}

EPA Comment: *Recommend that ADEQ provide a draft of this worksheet to EPA and the public for review prior to finalizing.*

Base cost is considered the minimum cost to achieve water quality standards. As a non-binding guideline, alternatives costing less than 120 percent of the base cost are presumed to be considered economically efficient. This economic efficiency guideline presumes that the reduction of pollutant loads below the minimum level of pollution control has an environmental benefit which warrants the increased expenditure.

Following the evaluation of alternatives, the applicant must provide a basis for the selected alternative. This selection must be based on the practicability, economic efficiency, and social benefits of the alternative.

EPA comment: *Recommend that ADEQ develop a range of practicable alternatives and then use the difference in cost from base cost to select an alternative for implementation. With regard to the second paragraph, EPA recommends moving this into the “Alternatives Analysis” section. All alternatives that are evaluated should be practicable – the alternatives analysis is the step of the Tier 2 review that shows that degradation is “necessary; the socioeconomic analysis is a separate piece that shows that the allowable degradation is “important.”*

IMPLEMENTATION OF CONTROLS FOR NONPOINT POLLUTION SOURCES

EPA’s regulatory interpretation of 40 CFR§131.12(a)(2) is that federal Antidegradation Policy does not require DEQ to establish BMPs for nonpoint source pollution control where regulatory programs requiring BMPs do not exist. The CWA leaves it to the states to determine what, if any, controls on nonpoint sources are needed to provide for attainment of state WQS. States may adopt regulatory or voluntary programs to address nonpoint sources of pollution. Where a state has adopted a regulatory program for nonpoint source pollution control, the state must assure that such controls are properly implemented before authorization is granted to justify lowering of water quality.

EPA comment: *Similar to this section for nonpoint source pollution, with regard to allowing lowering of water quality in a high-quality waters, the EPA recommends the state lay out the steps for assuring the highest statutory and regulatory requirements for point sources are achieved and also assuring that the lowering that is being authorized will not impair existing uses as required by 40 CFR 131.12(a)(2). These are both requirements included in the state’s policy: “In allowing such degradation or lower water quality, the State shall assure water quality adequate to protect existing uses fully. Further, the State shall assure that (1) there shall be achieved the highest statutory and regulatory requirements for all new and existing point sources and (2) that the provisions of the Arkansas Water Quality Management Plan be implemented with regard to nonpoint sources.”*

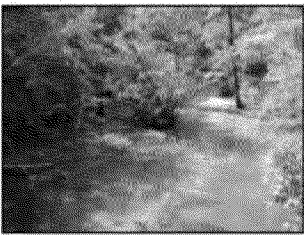





DEQ and the Arkansas Department of Agriculture provide cooperative oversight of nonpoint pollution sources and waters that are impaired by nonpoint sources. Nutrient Management Plans for permits/activities are one of the avenues used for addressing nonpoint pollution from liquid animal waste in nutrient surplus areas. The Arkansas Department of Agriculture requires waste management plans for non-liquid systems. The controlling agencies assure compliance through regulatory programs applicable to such activities. Activities (e.g. agriculture, silviculture) resulting in a new or expanded amount of pollutants entering waters solely from nonpoint sources are not subject to an antidegradation review prior to these activities commencing.

EPA comment: *With regard to controlling agencies, please explain how ADEQ will communicate with these controlling agencies to assure compliance with the applicable regulatory programs before authorizing lowering of water quality.*

ATTACHMENT 2

FLOW SEVERITY

Table 3.2. Flow-severity values.

	Severity Value	Description
1		<p>No Flow. When a flow severity of 1 is recorded for a sampling visit, record a flow value of 0 ft³/s (using parameter code 00061) for that sampling visit. A flow severity of 1 describes situations where the stream has water visible in isolated pools. There should be no obvious shallow subsurface flow in sand or gravel beds between isolated pools. "No flow" not only applies to streams with pools, but also to long reaches of streams that have water from bank to bank but no detectable flow.</p>
2		<p>Low Flow. When streamflow is considered low, record a flow-severity value of 2 for the visit, along with the corresponding flow measurement (parameter code 00061). In streams too shallow for a flow measurement where water movement is detected, record a value of < 0.10 ft³/s. In general, at low flow the stream would be characterized by flows that don't fill the normal stream channel. Water would not reach the base of both banks. Portions of the stream channel might be dry. Flow might be confined to one side of the stream channel.</p> <p><i>Note:</i> Use a stick or other light object to verify the direction of water movement. Make sure the movement is downstream and not the effect of wind.</p>
3		<p>Normal Flow. When streamflow is considered normal, record a flow severity value of 3 for the visit, along with the corresponding flow measurement (parameter code 00061). What is normal is highly dependent on the stream. Normality is characterized by flow that stays within the confines of the normal stream channel. Water generally reaches the base of each bank.</p>
4		<p>Flood Flow. Flow-severity values for high and flood flows have long been established by the EPA and are not sequential. Flood flow is reported as a flow severity of 4. Flood flows are those that leave the confines of the normal stream channel and move out onto the floodplain (either side of the stream).</p>
5		<p>High Flow. High flows are reported as a flow severity of 5. High flow would be characterized by flows that leave the normal stream channel but stay within the stream banks.</p>
6		<p>Dry. When the stream is dry, record a flow-severity value of 6 for the sampling visit. In this case the flow (parameter code 00061) is not reported, indicating that the stream is completely dry with no visible pools.</p>

ATTACHMENT 3

TOXIC SUBSTANCES
STATE EXAMPLE

Consistent with requirements at 40 CFR 131.20(a) the tables below list the new or updated Clean Water Act section 304(a) criteria since May 30, 2000 that the state has not adopted and presents an explanation regarding future consideration of the criteria.

Aquatic Life Criteria		
Pollutant	CAS Number	Explanation
Tributyltin (TBT)	—	State program priorities (e.g. water reuse) and other current projects combined with limited staff resources deferred consideration of this criterion. This criterion will potentially be considered during the 2019 - 2021 water quality standards revision period.
Copper	7440508	State program priorities (e.g. water reuse) and other current projects combined with limited staff resources deferred consideration of this criterion. This criterion will potentially be considered during the 2019 - 2021 water quality standards revision period.
Acrolein	107028	State program priorities (e.g. water reuse) and other current projects combined with limited staff resources deferred consideration of this criterion. This criterion will potentially be considered during the 2019 - 2021 water quality standards revision period.
Carbaryl	63252	State program priorities (e.g. water reuse) and other current projects combined with limited staff resources deferred consideration of this criterion. This criterion will potentially be considered during the 2019 - 2021 water quality standards revision period.
Ammonia	7664417	As part of the FY16 604(b) C6-40000054 workplan, OWRB is currently conducting pre-criteria technical work in support of the goal to propose numeric ammonia criteria to protect aquatic life. The intent of this technical work is to address expected challenges regarding criteria necessity and develop implementation provisions. Pre-criteria technical work is expected to continue for approximately three years.
Selenium	7782492	OWRB anticipates consideration of this criterion as part of the 2018 Triennial Review of Water Quality Standards.

Human Health Criteria		
Pollutant	CAS Number	Explanation
Pathogen and Pathogen Indicators	—	State program priorities (e.g. water reuse) and other current projects combined with limited staff resources deferred consideration of this criterion. This criterion will potentially be considered during the 2019 - 2021 water quality standards revision period.

Human Health Criteria		
Pollutant	CAS Number	Explanation
Methylmercury	22967926	As part of the FY16 604(b) C6-40000054 workplan, consideration of this criterion and associated implementation provisions is currently underway. It is expected that this criterion will be proposed as part of the 2017-2018 Water Quality Standards Rulemaking.
1,1,1-Trichloroethane	71556	Constituents included in the 2015 EPA update of 304(a) human health criteria were published after OWRB staff had initiated the 2015-2016 Triennial Review of Water Quality Standards. Therefore, these updated criteria were not addressed in the 2015-2016 Triennial Review of Water Quality Standards. OWRB expects to consider all or a portion of these human health criteria as part of the 2018 - 2019 Triennial Revision of Water Quality Standards and additional revisions, as necessary.
1,1,2,2-Tetrachloroethane	79345	
1,1,2-Trichloroethane	79005	
1,1-Dichloroethylene	75354	
1,2,4,5-Tetrachlorobenzene	95943	
1,2,4-Trichlorobenzene	120821	
1,2-Dichlorobenzene	95501	
1,2-Dichloroethane	107062	
1,2-Dichloropropane	78875	
1,2-Diphenylhydrazine	122667	
1,3-Dichlorobenzene	541731	
1,3-Dichloropropene	542756	
1,4-Dichlorobenzene	106467	
2,4,5-Trichlorophenol	95954	
2,4,6-Trichlorophenol	88062	
2,4-Dichlorophenol	120832	
2,4-Dimethylphenol	105679	
2,4-Dinitrophenol	51285	
2,4-Dinitrotoluene	121142	
2-Chloronaphthalene	91587	
2-Chlorophenol	95578	
2-Methyl-4,6-Dinitrophenol	534521	
3,3'-Dichlorobenzidine	91941	
3-Methyl-4-Chlorophenol	59507	
Acenaphthene	83329	
Acrolein	107028	
Acrylonitrile	107131	
Aldrin	309002	
alpha-Endosulfan	959988	
alpha-Hexachlorocyclohexane (HCH)	319846	
Anthracene	120127	
Antimony	7440360	
Benzene	71432	
Benzidine	92875	
Benzo(a)anthracene	56553	

Human Health Criteria		
Pollutant	CAS Number	Explanation
Benzo(a)pyrene	50328	<p>Constituents included in the 2015 EPA update of 304(a) human health criteria were published after OWRB staff had initiated the 2015-2016 Triennial Review of Water Quality Standards. Therefore, these updated criteria were not addressed in the 2015-2016 Triennial Review of Water Quality Standards. OWRB expects to consider all or a portion of these human health criteria as part of the 2018 - 2019 Triennial Revision of Water Quality Standards and additional revisions, as necessary.</p>
Benzo(b)fluoranthene	205992	
Benzo(k)fluoranthene	207089	
beta-Endosulfan	33213659	
beta-Hexachlorocyclohexane (HCH)	319857	
Bis(2-Chloro-1-methylethyl) Ether	108601	
Bis(2-Chloroethyl) Ether	111444	
Bis(2-Ethylhexyl) Phthalate	117817	
Bis(Chloromethyl) Ether	542881	
Bromoform	75252	
Butylbenzyl Phthalate	85687	
Carbon Tetrachloride	56235	
Chlordane	57749	
Chlorobenzene	108907	
Chlorodibromomethane	124481	
Chloroform	67663	
Chlorophenoxy Herbicide (2,4,5-TP) [Silvex]	93721	
Chlorophenoxy Herbicide (2,4-D)	94757	
Chrysene	218019	
Cyanide	57125	
Dibenzo(a,h)anthracene	53703	
Dichlorobromomethane	75274	
Dieldrin	60571	
Diethyl Phthalate	84662	
Dimethyl Phthalate	131113	
Di-n-Butyl Phthalate	84742	
Dinitrophenols	25550587	
Endosulfan Sulfate	1031078	
Endrin Aldehyde	7421934	
Endrin	72208	
Ethylbenzene	100414	
Fluoranthene	206440	
Fluorene	86737	
gamma-Hexachlorocyclohexane (HCH) [Lindane]	58899	
Heptachlor Epoxide	1024573	
Heptachlor	76448	
Hexachlorobenzene	118741	

Human Health Criteria		
Pollutant	CAS Number	Explanation
Hexachlorobutadiene	87683	<p>Constituents included in the 2015 EPA update of 304(a) human health criteria were published after OWRB staff had initiated the 2015-2016 Triennial Review of Water Quality Standards. Therefore, these updated criteria were not addressed in the 2015-2016 Triennial Review of Water Quality Standards. OWRB expects to consider all or a portion of these human health criteria as part of the 2018 - 2019 Triennial Revision of Water Quality Standards and additional revisions, as necessary.</p>
Hexachlorocyclohexane (HCH) - Technical	608731	
Hexachlorocyclopentadiene	77474	
Hexachloroethane	67721	
Indeno(1,2,3-cd)pyrene	193395	
Isophorone	78591	
Methoxychlor	72435	
Methyl Bromide	74839	
Methylene Chloride	75092	
Nitrobenzene	98953	
Nitrosodibutylamine	924163	
Nitrosodiethylamine	55185	
Nitrosopyrrolidine	930552	
N-Nitrosodimethylamine	62759	
N-Nitrosodi-n-Propylamine	621647	
N-Nitrosodiphenylamine	86306	
p,p'-Dichlorodiphenyldichloroethane (DDD)	72548	
p,p'-Dichlorodiphenyldichloroethylene (DDE)	72559	
p,p'-Dichlorodiphenyltrichloroethane (DDT)	50293	
Pentachlorobenzene	608935	
Pentachlorophenol	87865	
Phenol	108952	
Polychlorinated Biphenyls (PCBs)		
Pyrene	129000	
Selenium	7782492	
Tetrachloroethylene	127184	
Toluene	108883	
Toxaphene	8001352	
Trans-1,2-Dichloroethylene	156605	
Trichloroethylene	79016	
Vinyl Chloride	75014	

Louisiana Department of Environmental Quality (LDEQ) 2016 Triennial Revision Actions on Clean Water Act (CWA) 304(a) New and Updated Criteria Recommendations Published by the Environmental Protection Agency (EPA) since May 30, 2000

November 22, 2019

This document describes Louisiana's actions for all parameters having new or updated criteria recommendations published by the EPA since May 30, 2000 through the initiation of the 2016 triennial revision. All CWA 304(a) criteria recommendations were reviewed for the 2016 triennial revision. Data collected from the ambient surface water quality monitoring program (and other special water quality monitoring projects), and EPA criteria recommendation documents were used to inform the agency on actions for the 2016 triennial revision.

Criteria recommendations published after the initiation of the 2016 triennial revision were not considered in this review, including aluminum (2018) and cyanotoxins (2019). Criteria recommendations the agency will propose for adoption will be included in proposed rule WQ097. WQ097 is expected to be published for public review and comment in the Louisiana Register in December 2019.

Aquatic Life Criteria (ALC) Recommendations

Criteria Recommendations with Existing ALC

Substance	CAS #	Action
Cadmium	7440-43-9	LDEQ efforts to revise cadmium ALC are ongoing. Cadmium ALC recommendation was published by EPA in 2016. The agency is evaluating EPA's species recalculation procedure.
Copper	7440-50-8	LDEQ efforts to revise copper freshwater ALC are ongoing. Copper freshwater ALC recommendation was published by EPA in 2007. Use of the biotic ligand model (BLM) to develop site-specific criteria is proposed in WQ097; however, additional water quality monitoring data is needed to inform appropriate use of the model.

Criteria Recommendations without Existing ALC

Substance	CAS #	Action
Ammonia	7664-41-7	LDEQ efforts to develop ammonia freshwater ALC are complete. EPA published ammonia freshwater ALC in 2013. Ammonia freshwater ALC is proposed in WQ097.
Selenium	7782-49-2	LDEQ efforts to develop selenium freshwater ALC are ongoing. Selenium freshwater ALC recommendations were published by EPA in 2016. The agency is evaluating EPA's recommendations.
Nutrients	N/A	LDEQ efforts regarding nutrient criteria are ongoing. LDEQ is evaluating translators for the narrative nutrient criteria through determination of thresholds for inland rivers and streams, and inland lakes and reservoirs.
Acrolein	107-02-8	No action warranted for the 2016 triennial revision. Substances were not sampled by the agency from 2006 to 2016; insufficient data found from other water quality monitoring sources. HHC recommendations published by EPA for acrolein in 2009, carbaryl in 2012, diazinon and nonylphenol in 2005, and tributyltin in 2004. LDEQ will reevaluate criteria recommendations with next triennial revision.
Carbaryl	63-25-2	
Diazinon	333-41-5	
Nonylphenol	84852-15-3	
Tributyltin (TBT)	N/A	

Human Health Criteria (HHC) Recommendations

Criteria Recommendations with Existing HHC

Substance	CAS #	Action
Pathogen and Pathogen Indicators	N/A	LDEQ efforts to develop recreational water quality criteria related to pathogen and pathogen indicators were promulgated in 2016, through WQ092. EPA published recommendations in 2012.
Aldrin	309-00-2	LDEQ efforts to revise HHC are ongoing. The agency is evaluating EPA's recommended update to HHC methodology published in 2000; particularly the use of bioaccumulation factors in place of bioconcentration factors to derive HHC.
Arsenic	7440-38-2	
Benzene	71-43-2	
Benzidine	92-87-5	
Bromodichloromethane	75-27-4	
Bromoform (Tribromomethane)	75-25-2	
Cadmium	7440-43-9	

Substance	CAS #	Action
Carbon Tetrachloride (Tetrachloromethane)	56-23-5	
Chlordane	57-74-9	
Chloroform (Trichloromethane)	67-66-3	
2-Chlorophenol	95-57-8	
3-Chlorophenol	108-43-0	
4-Chlorophenol	106-48-9	
Chromium III	10025-73-7	
Chromium VI	18540-29-9	
Copper	7440-50-8	
Cyanide	57-12-5	
DDE	72-55-9	
DDT	50-29-3	
Dibromochloromethane	124-48-1	
1,2-Dichloroethane (EDC)	107-06-2	
1,1-Dichloroethylene	75-35-4	
2,4-Dichlorophenoxyacetic acid (2,4-D)	94-75-7	
2,3-Dichlorophenol	576-24-9	
2,4-Dichlorophenol	120-83-2	
2,5-Dichlorophenol	583-78-8	
2,6-Dichlorophenol	87-65-0	
3,4-Dichlorophenol	95-77-2	
1,3-Dichloropropane	542-75-6	
Dieldrin	60-57-1	
Endosulfan	115-29-7	
Endrin	72-20-8	
Ethylbenzene	100-41-4	
Heptachlor	76-44-8	
Hexachlorobenzene	118-74-1	
Hexachlorobutadiene	87-68-3	
Hexachlorocyclohexane (gamma BHC; Lindane)	58-89-9	
Lead	7439-92-1	
Mercury	7439-97-6	
Methylene chloride (Dichloromethane)	75-09-2	
Phenol (Total)	108-95-2	
Polychlorinated Biphenyls, Total (PCB's)	1336-36-3	
TDE (DDD)	72-54-8	
2,3,7,8-Tetrachlorodibenzo- p-dioxin (2,3,7,8-TCDD)	1746-01-6	